The Journal of THORACIC AND CARDIOVASCULAR SURGERY

Official organ, The American Association for Thoracic Surgery and The Samson Thoracic Surgical Society

Editor DWIGHT C. McGOON, *Rochester, Minn.*

Associate editors PHILIP E. BERNATZ, *Rochester, Minn.*
MICHAEL P. KAYE, *Rochester, Minn.*

Advisory editorial board
PAUL ADKINS, *Washington, D. C.*
RALPH D. ALLEY, *Albany*
RONALD J. BAIRD, *Toronto*
EDWARD J. BEATTIE, JR., *New York*
WILLARD M. DAGGETT, *Boston*
DONALD B. DOTY, *Iowa City*
DONALD B. EFFLER, *Syracuse*
L. PENFIELD FABER, *Chicago*
HERMES C. GRILLO, *Boston*
GERARD A. KAISER, *Miami*
JOHN W. KIRKLIN, *Birmingham*
GEORGE G. LINDESMITH, *Los Angeles*
FLOYD D. LOOP, *Cleveland*
GEORGE J. MAGOVERN, *Pittsburgh*
JAMES R. MALM, *New York*
DONALD G. MULDER, *Los Angeles*
THOMAS F. NEALON, JR., *New York*
FREDERICK G. PEARSON, *Toronto*
DAVID C. SABISTON, JR., *Durham, N. C.*
J. GORDON SCANNELL, *Boston*
DAVID B. SKINNER, *Chicago*
NICHOLAS P. D. SMYTH, *Washington, D. C.*
FRANK C. SPENCER, *New York*
ALBERT STARR, *Portland*
JOE R. UTLEY, *San Diego*
V. L. WILLMAN, *St. Louis*

Editorial assistant AGNES M. OSBORN, *Rochester, Minn.*

Former Editors EVARTS A. GRAHAM, *Editor, 1931-1957*
EMILE HOLMAN, *Editor, 1957-1962*
BRIAN BLADES, *Editor, 1962-1977*

Volume 79, January-June, 1980
The C. V. Mosby Company
St. Louis, Mo.

Volume 79
Copyright © 1980 by The C. V. Mosby Company
All rights reserved
Printed in the United States of America

Author index*

A

Abel RM, 44, 729
Addonizio VP Jr, 91
Adzick NS, 19, 372
Ahmed M, 609, 896
Akins CW, 700
Akl BF, 97
Alam M, 628
Alford WC Jr, 942 (L)
Alonso DR, 44
Alpert J, 729
Andersen HA, 540 (C)
Anderson RH, 244, 639 (L)
Anderson RP, 366, 379 (D)
Andrews RW, 237
Anholm J, 645
Arciniegas E, 303, 306, 582, 639 (L), 876
Arensberg D, 926
Arnold PG, 142
Austen WG, 19, 372, 700, 812
Auvil J, 705
Avery GJ II, 103

B

Baird DK, 718
Baird RJ, 809
Bajolet A, 689
Baker RR, 161
Bakhos M, 922
Balderman SC, 724
Bando T, 294
Baño-Rodrigo A, 592
Barker AF, 864
Barner HB, 27 (D)
Barratt-Boyes BG, 827
Battaglini JW, 873
Baumgartner WA, 499, 503 (D)
Becker AE, 63, 637 (L), 639 (L)
Bédard P, 301
Bellevue C, 83
Bell-Thomson J, 438
Belsey R, 667 (D)
Benfield J, 215 (D), 503 (D)
Bennett EJ, 456
Benvenisty AI, 103
Berger RL, 793 (L)
Bermudez G, 656
Bernatz PE, 937
Bernhard WF, 552
Bex JP, 689
Bhaktan EK, 729
Bharati S, 884
Binet J-P, 761
Björk VO, 679 (D)
Blaise C, 689
Blau F, 645
Blondeau P, 338
Bognolo DA, 266
Bonchek LI, 269, 911
Bonfils-Roberts EA, 833
Borgers M, 413
Borman JB, 402
Bosher LP, 473 (L)
Bowie PR, 472 (L)
Bradford JM, 109
Braimbridge MV, 26 (D), 29, 39, 355 (D)
Brandenburg RO, 256
Brener BJ, 729
Brief DK, 729
Brown BG, 188
Brown CM, 109
Brownlee RT, 680
Brummelhuis H, 738
Buckberg GD, 941 (L)
Buckley MJ, 19, 372, 700
Burchell HB, 637 (L)
Butchart EG, 812

C

Calhoon J, 217 (D)
Calhoun C, 173
Callaghan JC, 381
Čanković-Darracott S, 29
Carey JS, 188
Carlson PA, 782
Carpenter B, 472 (L)
Carpentier A, 338, 356 (D)
Carter SC, 67
Celis A, 74
Charrette EJP, 59, 579
Chauvaud S, 338
Chawla R, 241
Cheatham JE Jr, 933
Cheyney KF, 314
Ching N, 833
Chitwood WR Jr, 570
Choe S-S, 74
Cimochowski GE, 358, 364 (D)
Cleveland RJ, 937
Cohn L, 241, 713
Collins JJ Jr, 713
Colman RW, 91
Colo NA, 552
Conahan TJ III, 237
Conetta DA, 904
Conti CR, 904
Cooper JD, 532, 667 (D), 668 (C)
Craver JM, 109
Cukingnan RA, 188, 193 (D)
Cunha CLP, 256
Currie WD, 570
Cutler BS, 916

D

Daenen W, 413
Daggett WM, 288, 372, 700
Daily PO, 523, 531 (D)
d'Allaines C, 338
Damen J, 738
Davis JT, 447
DeGennaro VA, 833
de Jong JCF, 227
Delarue NC, 532
Deloche A, 338
de Lorimier AA, 138
Dembitsky WP, 181
DeMeester TR, 358, 656, 668 (D), 669 (C)
Derby GC, 838
Dietl CA, 864
Dinsmore RE, 288
Dische MR, 603
Dobnik DB, 793 (L)
Doty DB, 462
Douglas JS Jr, 109
Drexler L, 269
Drop LJ, 425
Drucker MH, 926
Dubost C, 338
Dufek JH, 755
Dugan DJ, 502 (D)
Duran CG, 326, 356 (D)
Düren DR, 63

E

Ebert PA, 27 (D), 186 (D), 194, 209 (D)
Ecker RR, 497 (D)
Eckner FA, 456
Eckstein PF, 266
Edmunds LH Jr, 91
Eich RH, 121
Eldred J, 503 (D), 536 (D)
Elkins RC, 933
Ellis FH Jr, 438
Ellis RJ, 173, 180 (D), 512 (D)
Ellison RG, 218, 937
Elstrodt JM, 513
Engelman MS, 402
Engelman RM, 705
Erath HG Jr, 770
Erdmann AJ III, 741
Estrera AS, 275
Evans RH, 358

F

Fabiani JN, 338
Fallon JT, 19
Fananapazir L, 117
Farooki ZQ, 306, 582, 876
Favaloro RG, 654 (D)
Feldman RL, 904
Fishbein MC, 552
Fisher E, 628
Fisher EA, 598
Fisher MB, 625
Flameng W, 413
Flemma RJ, 789
Foglia RP, 795 (L)
Ford WB, 1, 11 (D)
Fosburg RG, 192 (D), 370 (D)
Fowler BN, 288
Fraedrich G, 632
Frank MJ, 218
Frater RWM, 354 (D)
Freidell HV, 625
Frantz PT, 873
Franzblau CC, 552
Freedom RM, 776
Friedman HS, 74
Frost JO, 822

*January, pp. 1-160; February, pp. 161-320; March, pp. 321-482; April, pp. 483-644; May, pp. 645-802; June, pp. 803-964. *Key:* In this index, (C) = commentary, (D) = discussion, and (L) = letter to the Editor.

Fukuda M, 890
Fuster V, 256

G

Gailiunas P Jr, 241
Gallagher JJ, 542
Gallo I, 326
Gamallo-Amat C, 592
Gay WA Jr, 44
Gebhart WF, 625
Gelfand ET, 381, 387 (D)
Gersh BJ, 565
Gharavi MA, 12
Gielchinsky I, 729
Gillespie JT, 67
Gilston A, 942 (L)
Giuliani ER, 256
Goldenkranz RJ, 729
Goldstraw P, 851
Gomez-Engler HE, 864
Gottwik M, 632
Graham TP Jr, 770
Grant AF, 718
Grantham RN, 933
Greditzer A, 625
Green EW, 303, 306, 582, 876
Grehl TM, 483
Griffith JL, 447
Grillo HC, 867 (C), 937
Grishkin BA, 67

H

Haggitt RC, 438
Hakimi M, 306, 582, 876
Hall RV, 67
Haller JA Jr, 868
Hammon JW Jr, 770
Hammond GL, 146
Hanson EC, 372, 379 (D)
Harasaki H, 125
Hargens AR, 181
Harris EA, 827, 845
Harrison MR, 138
Hastreiter AR, 456, 598
Hatcher CR Jr, 109, 937
Haudenschild CC, 552
Hearse DJ, 29, 39
Hecart J, 689
Hehrlein FW, 632
Hellman CK, 645
Hendel PN, 718
Henry JG, 303
Heydorn WH, 67
Hilberman M, 432, 838
Hill RC, 570
Ho SY, 244
Hoffman BF, 103
Hoffmann TH, 211, 217 (D)
Holmes DR Jr, 565
Hongo T, 671
Horiuchi T, 671, 890
Hung J, 718
Hurley EJ, 483
Hvass U, 761

I

Inberg MV, 748
Ishizawa E, 890
Iwa T, 294

J

Jacobs GB, 125
Jacobs ML, 288
Jahnke EJ, 625
Jalonen J, 748
James EC, 67
Jarmolowski CR, 735
Jengo JA, 504
Jobes DR, 237
Johnson LF, 656
Johnson WD, 645
Johnston GG, 523
Jolly PC, 366, 371 (D)
Jones EL, 109
Jones RH, 617

K

Kagawa Y, 671, 679 (D)
Kahn DR, 27 (D), 755
Kaiser GC, 654 (D)
Kamath ML, 16 (D), 645, 655 (D)
Kaplan JA, 109
Kay JH, 12, 17 (D), 355 (D)
Kazenelson G, 776
Keelan M, 269
Keith FM, 579
Kelly DT, 718
Kelly P, 97
Kelly TF, 926
Keon WJ, 301
Keshishian JM, 314
Kessler M, 513
Killam HAW, 218
Killen DA, 312
King SB III, 109
Kiraly RJ, 125
Kirklin JW, 16 (D), 28 (D), 355 (D), 884, 937
Kitchin AH, 117
Klein R, 864
Klementschitsch P, 656
Koimattur AG, 1
Kolkka R, 432
Knight R, 864
Kopf G, 713

L

Laaksonen V, 748
Lajam F, 74
Laks H, 146
Lappas DG, 741
LaRaia PJ, 19
Latimer RG, 625
Lawrence GH, 216 (D), 364 (D), 864
Lawrence RS, 504, 512 (D)
Lawrie GM, 793 (L)
Lazarus JM, 241
Leckie BD, 718
Lees ES, 372
Lepley D Jr, 789
Lessana A, 338
Lev M, 884
Levine FH, 19, 28 (D), 372, 700
Levitsky S, 456, 598
Levy MJ, 765
Li W, 366
Liddle HV, 937
Lindesmith GG, 200 (D)
Lindop CR, 845
Linos DA, 453
Little AG, 656
Litwak RJ, 27 (D)
Losay J, 761
Losekoot TG, 637 (L)
Loucks P, 173
Love JW, 625
Lu C-T, 358
Lübbers DW, 513
Luckstead EF, 933

M

McAllister HA Jr, 884
McCormack RJM, 117
McCormick JR, 793 (L)
McEnany MT, 812
McFadden RB, 625
McGoon DC, 150, 169 (C), 209 (D), 256
McKegg PM, 845
McKenzie FN, 472 (L)
Macmanus Q, 864
McNamara DG, 283
McNamara JJ, 489, 498 (D)
MacVaugh H III, 237
Magilligan DJ Jr, 628
Maier HC, 860
Malm JR, 103
Maloney JD, 565
Manhas DR, 400 (D)
Marcelletti C, 63, 637 (L)
Mark GJ, 537
Mark JBD, 371 (D), 499, 535 (D)
Markowitz AHM, 121
Marzilli M, 803
Mattox KL, 836 (C)
Maxwell DD, 314
Mee R, 713
Mena I, 504
Mendez MA, 12
Menninger FJ III, 181
Merideth J, 565
Merrill JP, 241
Mieszala JR, 793 (L)
Mijangos JA, 17 (D)
Miller DC, 202, 388, 400 (D), 497 (D)
Miller WH, 1
Mills LJ, 275
Milo S, 244
Misaki T, 294
Mittleman M, 822
Modi VJ, 680
Moggio RA, 321
Mohri H, 671, 890
Montoya A, 922
Moodie DS, 793 (L)
Mook PH, 513
Moore HV, 218
Moran JM, 724
Moran S, 794 (L)
Moreno-Cabral RJ, 202, 209 (D), 388
Moreno-Granado F, 592
Morgan EA, 109
Moser KM, 523
Moskowitz SE, 402
Muhm JR, 469
Mulch J, 632
Mulder DG, 937
Mullen DC, 789
Murray JJ, 625
Myojin K, 713

N

Naifeh JG, 483, 488 (D)
Najafi H, 937
Natarajan P, 266
Neal J, 97
Nealon TF Jr, 833
Neely JR, 940 (L)
Nelson RJ, 504
Newman GE, 617
Nichols WW, 904
Niles NW II, 916
Nitta S, 671
Nolan SP, 473 (L)
Nosé Y, 125
Nudelman I, 765

O

Ochoteco A, 326
Ogata T, 856
Ohtaka M, 741
Olinger GN, 269, 789
Olley PM, 603
Ominsky AJ, 237
O'Neill MJ Jr, 940 (L)
Oyer PE, 202, 388

P

Pai GP, 218
Pairolero PC, 142 453
Paneth M, 349
Parker FB Jr, 121
Parkman R, 552
Parsonnet V, 224 (D), 729
Paul JS, 44

Pearson FG, 532
Peiargonio S, 283
Pellegrini CA, 656
Pellom GL, 570
Pepine CJ, 904
Peters RM, 181, 187 (D), 216 (D), 503 (D)
Peyton MD, 933
Phelan PD, 639 (L)
Pickard LR, 868
Pifarré R, 724, 922
Piwnica A, 338
Plasse HM, 822
Platt MR, 275
Poirier RA, 121, 735
Pomar JL, 326
Pooley RW, 321
Potts R, 173
Poveda J, 326
Pranger RL, 513
Pressler V, 489

Q

Quero-Jiménez M, 592

R

Rahimtoola SH, 163
Rainer WG, 225 (D), 387 (D)
Rajamäki A, 748
Rajani R, 301
Ransdell HT, 211
Razook JD, 933
Reed GE, 321, 355 (D)
Reitz BA, 186 (D), 202, 388
Relland J, 338
Rerych SK, 617
Reuben CF, 789
Revuelta JM, 326
Rice PL, 922
Rickards A, 609
Roberts AJ, 44
Roberts KD, 464
Robillard J, 97
Robotham JL, 868
Roe BB, 937
Rohrer C, 705
Rose EA, 103
Rosenfeldt FL, 29
Rosenkranz ER, 181
Rossiter SJ, 388, 471 (L)
Rousou JH, 705
Rowe RD, 776
Rubin JW, 218, 225 (D)
Rytel M, 269

S

Sabbah HN, 803
Sabiston DC Jr, 617
Sakurai H, 74
Salerno TA, 59, 579
Samadani SR, 1
Sanders J, 241
Sanderson RG, 386 (D)
Sandiford FM, 283
Sandstrom RE, 537
Sato N, 671
Sbokos C, 812
Scanlon PJ, 724
Schachner A, 765
Scheidegger D, 425
Schmidt DH, 645
Schuchmann GF, 67
Schuilenburg RM, 63
Schwartz AJ, 237
Scotten LN, 680
Seabra-Gomes R, 609
Sealy WC, 542
Seward JB, 256
Shaw RC, 529 (D)
Shaw RR, 275
Shaw TRD, 117
Shih J-Y, 283
Shindo G, 603
Shore DF, 349, 357 (D)
Shumway NE, 202, 388
Silove ED, 464
Silver MD, 693
Simmons CJ, 523
Sinclair D, 738
Singh RKK, 827
Singh SP, 464
Sink JD, 570
Skinner DB, 656
Sloan H, 937
Smit Sibinga CT, 227
Smith CW, 770
Smith D, 530 (D)
Smith JB, 91
Smyth NPD, 314
Snow JL, 125
Somerville W, 896
Sommers SC, 860
Spencer FC, 822, 937
Spencer RJ, 838
Spotnitz HM, 103
Stalpaert G, 413
Stanford W, 789
Starr A, 864
Stein PD, 473 (L), 803
Sterns LP, 381
Stewart DA, 39
Stiles QR, 192 (D), 937
Stinson EB, 202, 388, 487 (D), 838
Strauss JF III, 91
Strich G, 812
Subramanian VA, 44
Suemasu K, 856
Sugiura Y, 856
Sullivan HJ, 922
Sullivan ME, 1
Swanson DK, 755
Symbas PN, 926
Szycher M, 552

T

Taber RE, 668 (D)
Takamoto S, 19
Tanaka M, 671
Teixeira OHP, 472 (L)
ten Duis HJ, 227
Tepas JJ III, 868
Teranaka M, 294
Tezuka F, 890
Thomas FD, 121
Thomas PA Jr, 471 (L)
Thompson R, 609, 896
Thompson WM, 933
Thubrikar M, 473 (L)
Todd TR, 371 (D), 532, 536 (D)
Toole JC, 266
Torstveit J, 864
Towers M, 896
Truccone NJ, 582
Trusler GA, 603, 776
Tsuchiya R, 856
Tucker WY Jr, 194, 713
Turley K, 194, 201 (D)
Tyers GFO, 795 (L)

U

Ubago JL, 326
Uren RF, 718
Urquhart RR, 625
Urschel HC Jr, 937
Utley J, 180 (D), 181

V

Vancini M, 464
van der Horst RL, 456, 598
Vander Salm TJ, 916
van der Starre P, 738
Vanstrom N, 12
Vargas GM, 97
Vargo TA, 283
Vertrees RA, 705
Vezeridis MP, 288
Vijayanagar R, 266
Vlasis SE, 926

W

Wagenvoort CA, 637 (L)
Waldhausen JA, 940 (L)
Walker DK, 680
Walkinshaw MD, 504
Wallsh E, 10 (D)
Wang C-I, 656
Wasan SM, 59
Webb WR, 937
Wechsler AS, 570, 794 (L)
Weinstein G, 312
Weiss G, 713
Weissberg D, 532
Wells MR, 173
Wernly JA, 656
Wesolowski JS, 552
White JJ, 868
Wholey MH, 1
Wildevuur CRH, 227, 513, 522 (D)
Wilkinson JL, 244
Willcox TW, 845
Williams WG, 603, 776
Wisniewski A, 173
Wittig JH, 188
Wong P, 349
Wu W, 83

Y

Yacoub M, 609, 896
Yamaki S, 890
Yokoyama T, 12
Young RH, 537
Youngson GG, 472 (L)

Z

Zarins CK, 358
Zbuzek VK, 83
Zikria EA, 1, 10 (D)
Zir L, 288
Zubiate P, 12

Subject index*

A

Abscess, lung, primary (Estrera et al.), 275
Activated clotting time for control of heparin and protamine therapy during cardiopulmonary bypass, clinical experience with (Akl et al.), 97
Acute adrenal failure (Gilston), 942 (letter); Reply (Alford), 942
renal failure following cardiac operation(s) (Gailiunas et al.), 241
sequential pathophysiological changes characterizing progression from renal dysfunction to (Hilberman et al.), 838
respiratory insufficiency and bronchial stenosis, post-traumatic (Gomez-Engler et al.), 864
Adenoid cystic and mucoepidermoid carcinomas of esophagus (Bell-Thomson et al.), 438
Adrenal failure, acute (Gilston), 942 (letter); Reply (Alford), 942
American Association for Thoracic Surgery: Announcement of 1980 Annual Meeting, 151, 317, 479, 641
Announcement of 1981 Annual Meeting, 796, 944
Graham Traveling Fellowship, 946
Program of 1980 Annual Meeting, 475
Board of Thoracic Surgery: Notice of certifying examination, 154, 320, 482, 644, 799, 943
Notice of recertification examination, 482, 644, 799, 943
position paper of: training, examination, and certification of thoracic surgeon (Ellison et al.), 937
Anastomosis, primary, after esophageal elongation by bougienage and esophagomyotomy: long gap esophageal atresia (de Lorimier and Harrison), 138
Anastomotic stricture, esophagogastric, fluoroscopic control for dilation of (Keshishian et al.), 314 (curr. tech.)
Anatomy, surgical, and atrioventricular conduction tissues of hearts with isolated ventricular septal defects (Milo et al.), 244
of atrioventricular valve in intermediate type of common atrioventricular orifice (Bharati et al.), 884
Anemia, hemolytic, with porcine xenograft aortic and mitral valves (Magilligan et al.), 628
hypergammaglobulinemia, and mediastinal lymph node hyperplasia (Maier and Sommers), 860
Aneurysm(s), aortic, ascending, myocardial protection with hypothermia and potassium cardioplegia during operation for (Akins et al.), 700
resection of, and replacement of aortic valve, concomitant: operative and long-term results with "conventional" techniques in 90 patients (Miller et al.), 388
thoracic: natural history and treatment (Pressler and McNamara), 489
Aneurysm(s)—Cont'd
coronary, multiple, due to Kawasaki's disease, successful triple coronary artery bypass in child with (Sandiford et al.), 283
left ventricular, management of long-standing cardiocutaneous fistulas after resection of (Stanford et al.), 789
Angina, relief of, influence of complete coronary revascularization on (Cukingnan et al.), 188
unstable: clinicoarteriographic correlation and long-term results of early myocardial revascularization (Ahmed et al.), 609
Angiography, nuclear, first-pass rest and exercise, assessment by: improvement in left ventricular function after myocardial revascularization (Hellman et al.), 645
versus intraoperative phasic flow: predictors of late aorta-coronary graft patency (Balderman et al.), 724
Angioplasty, transluminal, percutaneous, in management of occlusive disease involving coronary arteries and saphenous vein bypass grafts: preliminary results (Ford et al.), 1
Annuloplasty, mitral, measured, durability of: 17 year study (Reed et al.), 321
tricuspid, with flexible linear reducer, technique for: medium-term results (Hecart et al.), 689
Anomalous left coronary artery in infant: recovery of ventricular function following early direct aortic implantation (Levitsky et al.), 598
pulmonary artery, management of (Phelan), 639 (letter); Reply (Arciniegas), 639
pulmonary venous connection, partial, with sinus venosus atrial septal defect, late results following (Trusler et al.), 776
Anomaly, Ebstein's, Fontan's operation for (Marcelletti et al.), 63
Anulus, valve, small, and dysplastic leaflets, surgical treatment of congenital pulmonary stenosis due to (Vancini et al.), 464
Aorta, ascending, small bowel infarction complicating intra-aortic balloon counterpulsation via (Jarmolowski and Poirier), 735
coarctation of, during infancy, results of repair of (Williams et al.), 603
-coronary bypass. *See* Bypass.
graft patency, late, predictors of: intraoperative phasic flow versus angiography (Balderman et al.), 724
Aortic aneurysm(s), ascending, myocardial protection with hypothermia and potassium cardioplegia during operation for (Akins et al.), 700
resection of, and replacement of aortic valve, concomitant: operative and long-term results with "conventional" techniques in 90 patients (Miller et al.), 388
thoracic: natural history and treatment (Pressler and McNamara), 489

*January, pp. 1-160; February, pp. 161-320; March, pp. 321-482; April, pp. 483-644; May, pp. 645-802; June, pp. 803-964.

Aortic—Cont'd
atresia (Doty), 462 (edit.)
surgical palliation in (Levitsky et al.), 456
bovine, and human dura mater valves: comparative study in artificial hearts in calves (Harasaki et al.), 125
bypass, extended (Gelfand et al.), 381
cross-clamping, continuous versus intermittent, advantages of hypothermic potassium cardioplegia and superiority of (Roberts et al.), 44
dissection, intimo-intimal intussusception and other unusual manifestations of (Symbas et al.), 926
implantation, direct, early, recovery of ventricular function following: anomalous left coronary artery in infant (Levitsky et al.), 598
incompetence, severe, valve replacement should not be performed in all asymptomatic patients with (Rahimtoola), 163 (edit.)
insufficiency, chronic, preoperative M-mode echocardiography as predictor of surgical results in (Cunha et al.), 256
intra-, balloon, rupture of: case report (Rajani et al.), 301
and mitral valves, xenograft, porcine, hemolytic anemia with (Magilligan et al.), 628
occlusion, hypothermic, prolonged, comparison of single-dose and multiple-dose crystalloid and blood potassium cardioplegia during (Takamoto et al.), 19
Aortic valve. *See* Valve.
valvular insufficiency and postductal aortic coarctation in adult. Combined surgical management through median sternotomy: new surgical approach (Vijayanagar et al.), 266
Aortitis, calcific, innominate artery–coronary artery bypass graft in patient with (Weinstein and Killen), 312 (curr. tech.)
Arrest, cardiac, ischemic, in dog, additive protective effects of hypothermia and chemical cardioplegia during (Rosenfeldt et al.), 29
in rat, additive protective effects of hypothermia and chemical cardioplegia during (Hearse et al.), 39
ischemic, prolonged, using hypothermic cardioplegia, safety of (Engelman et al.), 705
Arterial pressure and flow rate at moderate hypothermia does not result in cerebral dysfunction, reduction of (Ellis et al.), 173
Artery(ies) bypass, coronary, in patients with hyperlipoproteinemia, early and late results of (Hanson et al.), 372
triple, successful, in child with multiple coronary aneurysms due to Kawasaki's disease (Sandiford et al.), 283
graft, innominate artery–coronary, in patient with calcific aortitis (Weinstein and Killen), 312 (curr. tech.)
grafting, coronary, and valve replacement, interstitial hydrostatic pressures in patients undergoing (Menninger et al.), 181
operation, coronary, return to work after (Niles et al.), 916
coronary, left, anomalous, in infant: recovery of ventricular function following early direct aortic implantation (Levitsky et al.), 598
main, on left ventricular function, effect of graded narrowing of (Feldman et al.), 904
and saphenous vein bypass grafts, percutaneous transluminal angioplasty in management of occlusive disease involving: preliminary results (Ford et al.), 1
disease, coronary, left main, spectrum of: variables affecting patient selection, management, and death (Jones et al.), 109
Artery(ies), disease, coronary—Cont'd
surgical treatment of mitral insufficiency secondary to (Kay et al.), 12
diversion, right atrium–pulmonary, total, surgical approach for S,L,L single ventricle incorporating (Moreno-Cabral et al.), 202
great, transposition of, complete, with pulmonary hypertension, indication for total correction of (Yamaki et al.), 890
congenitally corrected, hypoplasia of systemic ventricle in: preoperative documentation and possible implications of operation (Erath et al.), 770
wall thickness of ventricular chambers in: surgical implications (Baño-Rodrigo et al.), 592
mammary, internal, and saphenous vein, functional comparison of coronary bypass grafts of (Myojin et al.), 713
pulmonary, left, anomalous, management of (Phelan), 639 (letter); Reply (Arciniegas), 639
Artificial hearts in calves, comparative study of: bovine aortic and human dura mater valves (Harasaki et al.), 125
Aspergillus terreus infective endocarditis on porcine heterograft valve (Drexler et al.), 269
Atresia, aortic (Doty), 462 (edit.)
surgical palliation in (Levitsky et al.), 456
bronchial, natural history of: serial observations of case from birth to operative correction (Haller et al.), 868
esophageal, long gap: primary anastomosis after esophageal elongation by bougienage and esophagomyotomy (de Lorimier and Harrison), 138
Atrial septal defect, sinus venosus, late results following partial anomalous pulmonary venous connection with (Trusler et al.), 776
Atrioventricular canal, complete, type C, tetralogy of Fallot with: surgical repair in three cases (Binet et al.), 761
conduction tissues and surgical anatomy of hearts with isolated ventricular septal defects (Milo et al.), 244
valve in intermediate type of common atrioventricular orifice, surgical anatomy of (Bharati et al.), 884
Atrium–pulmonary artery diversion, right, total, surgical approach for S,L,L single ventricle incorporating (Moreno-Cabral et al.), 202

B

Balloon counterpulsation, intra-aortic, via ascending aorta, small bowel infarction complicating (Jarmolowski and Poirier), 735
intra-aortic, rupture of: case report (Rajani et al.), 301
pumping, intra-aortic, limb ischemia during: indication for femorofemoral crossover graft (Alpert et al.), 729
Beta adrenergic blockade in dogs, pharmacologic antagonism of. II. Hemodynamic effects of simultaneous intravenous infusion of isoproterenol and dopamine during chronic propranolol administration (Spotnitz et al.), 103
Bileaflet heart valve prosthesis, all–pyrolytic carbon, first clinical experience with (Hehrlein et al.), 632
Biopsy, lung, diagnostic, in immunocompromised patient (Thomas), 471 (letter); Reply (Rossiter), 471
needle, percutaneous, in management of patients with peripheral pulmonary nodules, role of (Baker), 161 (edit.)
Björk-Shiley heart valve prostheses recovered at necropsy or operation, wear in (Silver), 693

Blockade, beta adrenergic, in dogs, pharmacologic antagonism of. II. Hemodynamic effects of simultaneous intravenous infusion of isoproterenol and dopamine during chronic propranolol administration (Spotnitz et al.), 103
Blood and crystalloid potassium cardioplegia, single-dose and multiple-dose, during prolonged hypothermic aortic occlusion, comparison of (Takamoto et al.), 19
Bougienage and esophagomyotomy, primary anastomosis after esophageal elongation by: long gap esophageal atresia (de Lorimier and Harrison), 138
Bovine aortic and human dura mater valves: comparative study in artificial hearts in calves (Harasaki et al.), 125
Bowel infarction, small, complicating intra-aortic balloon counterpulsation via ascending aorta (Jarmolowski and Poirier), 735
Bronchial atresia, natural history of: serial observations of case from birth to operative correction (Haller et al.), 868
carcinoid tumors: 20 years' experience (Todd et al.), 532
stenosis and acute respiratory insufficiency, post-traumatic (Gomez-Engler et al.), 864
stump with pleura, complications associated with covering (Pairolero and Linos), 453
Bronchopleural fistula: treatment by transposition of pectoralis major muscle (Pairolero and Arnold), 142 (curr. tech.)
Bundles, Kent, surgical approach to septal area of heart based on experiences with 45 patients with (Sealy and Gallagher), 542
Bypass, aorta-coronary, late graft patency and symptom relief after (Fowler et al.), 288
aortic, extended (Gelfand et al.), 381
artery, coronary, in patients with hyperlipoproteinemia, early and late results of (Hanson et al.), 372
triple, successful, in child with multiple coronary aneurysms due to Kawasaki's disease (Sandiford et al.), 283
cardiopulmonary, with bubble oxygenator, thromboxane synthesis and platelet secretion during (Addonizio et al.), 91
clinical experience with activated clotting time for control of heparin and protamine therapy during (Akl et al.), 97
effects of elevated red blood cell 2,3-diphosphoglycerate concentration on myocardial oxygenation and metabolism during (Jalonen et al.), 748
using gas-sterilized pump components, exposure of patients to ethylene oxide during (Lindop et al.), 845
hypothermic, does pulsatile flow improve perfusion during (Singh et al.), 827
influence of prearrest factors on preservation of left ventricular function during (Butchart et al.), 812
low-pressure, low-flow, neurologic dysfunction following cardiac operation with (Kolkka and Hilberman), 432
peripheral vascular response to potassium administration during (Schwartz et al.), 237
graft(s), coronary, of saphenous vein and internal mammary artery, functional comparison of (Myojin et al.), 713
innominate artery–coronary artery, in patient with calcific aortitis (Weinstein and Killen), 312 (curr. tech.)
saphenous vein, and coronary arteries, percutaneous transluminal angioplasty in management of occlusive disease involving: preliminary results (Ford et al.), 1
grafting, aorta-coronary, in patients with severe left ventricular dysfunction (Hung et al.), 718
on ventricular function during rest and exercise, noninvasive assessment of effects of (Newman et al.), 617
Bypass grafting—Cont'd
artery, coronary, and valve replacement, interstitial hydrostatic pressures in patients undergoing (Menninger et al.), 181
prevention of endothelial damage during preparation of saphenous veins for (Bonchek), 911
regional myocardial function after (Moran), 794 (letter); Reply (Wechsler), 794
operation, artery, coronary, return to work after (Niles et al.), 916

C

CABG and valve replacement, interstitial hydrostatic pressures in patients undergoing (Menninger et al.), 181
Calcific aortitis, innominate artery–coronary artery bypass in patient with (Weinstein and Killen), 312 (curr. tech.)
Calcium concentration, ionized, plasma: important determinant of hemodynamic response to calcium infusion (Drop and Scheidegger), 425
Canal, atrioventricular, complete, type C, tetralogy of Fallot with: surgical repair in three cases (Binet et al.), 761
Cancer, lung, anterior and cervical mediastinoscopy for determining operability and predicting resectability in (Jolly et al.), 366
Carcinoid tumors, bronchial: 20 years' experience (Todd et al.), 532
Carcinoma(s), esophageal, treatment of: retrospective review (Schuchmann et al.), 67
of esophagus and gastric cardia, 20 year experience with surgical management of (Griffith and Davis), 447
mucoepidermoid and adenoid cystic (Bell-Thomson et al.), 438
of lung, comparison of lobectomy and wedge resection for (Hoffmann and Ransdell), 211
Cardia, gastric, and esophagus, carcinoma of, 20 year experience with surgical management of (Griffith and Davis), 447
Cardiac arrest, ischemic, in dog, additive protective effects of hypothermia and chemical cardioplegia during (Rosenfeldt et al.), 29
in rat, additive protective effects of hypothermia and chemical cardioplegia during (Hearse et al.), 39
catheterization, three contributors to (Carlson), 782 (historical perspectives)
hypothermia in man, ultrastructural and cytochemical correlates of myocardial protection by (Flameng et al.), 413
injuries, penetrating, potential, aggressive management of (DeGennaro et al.), 833
operation(s), acute renal failure following (Gailiunas et al.), 241
hematologic aspects of cardiotomy suction in (de Jong et al.), 227
with low-flow, low-pressure cardiopulmonary bypass, neurologic dysfunction following (Kolkka and Hilberman), 432
sequential pathophysiological changes characterizing progression from renal dysfunction to acute renal failure following (Hilberman et al.), 838
unusual complication of: unilateral sudden loss of hearing (Plasse et al.), 822
vasopressin release during (Wu et al.), 83
output measurements, thermodilution (Lawrie), 793 (letter); Replies (Moodie and McCormick et al.), 793
tamponade, manifestation of marked reduction of left ventricular end-diastolic volume in: pulsus paradoxus (Friedman et al.), 74
tumors, primary, in children (Arciniegas et al.), 582

Cardiocutaneous fistulas, long-standing, after resection of left ventricular aneurysms, management of (Stanford et al.), 789
Cardioplegia, chemical, and hypothermia during ischemic cardiac arrest in dog, additive protective effects of (Rosenfeldt et al.), 29
in rat, additive protective effects of (Hearse et al.), 39
controversy, Dr. Buckberg's solution is not answer to (O'Neill et al.), 940 (letter); Reply (Buckberg), 941
crystalloid and blood potassium, single-dose and multiple-dose, during prolonged hypothermic aortic occlusion, comparison of (Takamoto et al.), 19
hypothermic, safety of prolonged ischemic arrest using (Engelman et al.), 705
potassium, and hypothermia during operation for ascending aortic aneurysms, myocardial protection with (Akins et al.), 700
hypothermic, and superiority of continuous versus intermittent aortic cross-clamping, advantages of (Roberts et al.), 44
Cardiopulmonary bypass. *See* Bypass.
Cardiotomy suction in cardiac operations, hematologic aspects of (de Jong et al.), 227
Carotid endarterectomy and myocardial revascularization, simultaneous, experience with (Rice et al.), 922
Catheterization, cardiac, three contributors to (Carlson), 782 (historical perspectives)
Caval interruption, vena, continuing quest for ideal method of: Greenfield filter versus Mobin-Uddin umbrella (Cimochowski et al.), 358
Cerebral dysfunction, reduction of flow rate and arterial pressure at moderate hypothermia does not result in (Ellis et al.), 173
Certification, examination, and training of thoracic surgeon: position paper of American Board of Thoracic Surgery (Ellison et al.), 937
C_1esterase inhibitor, inhibition of hypotensive effect of plasma protein solutions by (van der Starre et al.), 738
Chambers, ventricular, in transposition of great arteries, wall thickness of: surgical implications (Baño-Rodrigo et al.), 592
Child, growing, with congenital mitral valve disease, repeated mitral valve replacement in (Nudelman et al.), 765
with multiple coronary aneurysms due to Kawasaki's disease, successful triple coronary artery bypass in (Sandiford et al.), 283
Childhood, malignant thymoma in (McKenzie and Youngson), 472 (letter); Reply (Bowie et al.), 472
Children, *Hemophilus influenzae* purulent pericarditis in: diagnostic and therapeutic considerations (Cheatham et al.), 933
primary cardiac tumors in (Arciniegas et al.), 582
Chronic aortic insufficiency, preoperative M-mode echocardiography as predictor of surgical results in (Cunha et al.), 256
pulmonary embolism, surgical management of: surgical treatment and late results (Daily et al.), 523
renal failure, myocardial revascularization in patients with (Love et al.), 625
Circulation, extracorporeal, using membrane instead of bubble oxygenators, improved tissue perfusion (Po_2 histograms) in (Pranger et al.), 513
Clotting time, activated, for control of heparin and protamine therapy during cardiopulmonary bypass, clinical experience with (Akl et al.), 97
Coarctation of aorta during infancy, results of repair of (Williams et al.), 603
Coarctation—Cont'd
aortic, postductal, and aortic valvular insufficiency in adult. Combined surgical management through median sternotomy: new surgical approach (Vijayanagar et al.), 266
Collagenous linings on impermeable prosthetic surfaces, development of (Bernhard et al.), 552
Common atrioventricular orifice, surgical anatomy of atrioventricular valve in intermediate type of (Bharati et al.), 884
Computed tomography in evaluation of intrathoracic lesions, role of (Muhm), 469 (edit.)
Computer simulation: diagnostic method in comparative studies of valve prostheses (Engelman et al.), 402
Conduction tissues, atrioventricular, and surgical anatomy of hearts with isolated ventricular septal defects (Milo et al.), 244
Congenital heart disease, changing role of palliative procedures in treatment of infants with (Turley et al.), 194
mitral valve disease, repeated mitral valve replacement in growing child with (Nudelman et al.), 765
pulmonary stenosis due to dysplastic leaflets and small valve anulus, surgical treatment of (Vancini et al.), 464
Congenitally corrected transposition of great arteries, hypoplasia of systemic ventricle in: preoperative documentation and possible implications of operation (Erath et al.), 770
Connection, venous, pulmonary, anomalous, partial, with sinus venosus atrial septal defect, late results following (Trusler et al.), 776
Contracture, ischemic, and mitochondrial function, correlation of (Sink et al.), 570
Contributors, three, to cardiac catheterization (Carlson), 782 (historical perspectives)
Controversy, cardioplegia, Dr. Buckberg's solution is not answer to (O'Neill et al.), 940 (letter); Reply (Buckberg), 941
Coronary artery. *See* Artery.
bypass. *See* Bypass.
revascularization, complete, on relief of angina, influence of (Cukingnan et al.), 188
sinus ostium, stenosis of: unusual site of obstruction in total anomalous pulmonary venous drainage (Arciniegas et al.), 303
Correction, operative, serial observations of case from birth to: natural history of bronchial atresia (Haller et al.), 868
total, of complete transposition of great arteries with pulmonary hypertension, indication for (Yamaki et al.), 890
Correspondence
Acute adrenal failure (Gilston), 942
Reply (Alford), 942
Diagnostic lung biopsy in immunocompromised patient (Thomas), 471
Reply (Rossiter), 471
Dr. Buckberg's solution is not answer to cardioplegia controversy (O'Neill et al.), 940
Reply (Buckberg), 941
In support of Kent (Burchell), 637
Reply (Anderson and Becker), 639
Malignant thymoma in childhood (McKenzie and Youngson), 472
Reply (Bowie et al.), 472
Management of anomalous left pulmonary artery (Phelan), 639
Reply (Arciniegas), 639
Mechanisms of opening of aortic valve (Stein), 473
Reply (Thubrikar et al.), 473
Myocardial preservation (Tyers), 795
Reply (Foglia), 795

Correspondence—Cont'd
Palliative Mustard or Rastelli operation in complete transposition (Marcelletti et al.), 637
Regional myocardial function after bypass grafting (Moran), 794
Reply (Wechsler), 794
Thermodilution cardiac output measurements (Lawrie), 793
Reply (Moodie), 793
Reply (McCormick et al.), 793
Counterpulsation, balloon, intra-aortic, via ascending aorta, small bowel infarction complicating (Jarmolowski and Poirier), 735
Cross-clamping, aortic, continuous versus intermittent, advantages of hypothermic potassium cardioplegia and superiority of (Roberts et al.), 44
Crystalloid and blood potassium cardioplegia, single-dose and multiple-dose, during prolonged hypothermic aortic occlusion, comparison of (Takamoto et al.), 19
Cyst, thoracic duct, of mediastinum (Tsuchiya et al.), 856
Cytochemical and ultrastructural correlates of myocardial protection by cardiac hypothermia in man (Flameng et al.), 413

D

Damage, endothelial, during preparation of saphenous veins for bypass grafting, prevention of (Bonchek), 911
Defect(s), septal, atrial, sinus venosus, late results following partial anomalous pulmonary venous connection with (Trusler et al.), 776
ventricular, isolated, surgical anatomy and atrioventricular conduction tissues of hearts with (Milo et al.), 244
post–myocardial infarction, surgical treatment of (Naifeh et al.), 483
Device, new, clinical evaluation of: hemolysis during pulsatile perfusion (Salerno et al.), 579
Dilation of esophagogastric anastomotic stricture, fluoroscopic control for (Keshishian et al.), 314 (curr. tech.)
2,3-Diphosphoglycerate concentration, red blood cell, elevated, on myocardial oxygenation and metabolism during cardiopulmonary bypass, effects of (Jalonen et al.), 748
Disease, artery, coronary, left main, spectrum of: variables affecting patient selection, management, and death (Jones et al.), 109
surgical treatment of mitral insufficiency secondary to (Kay et al.), 12
heart, congenital, changing role of palliative procedures in treatment of infants with (Turley et al.), 194
Kawasaki's, successful triple coronary artery bypass in child with multiple coronary aneurysms due to (Sandiford et al.), 283
occlusive, involving coronary arteries and saphenous vein bypass grafts, percutaneous transluminal angioplasty in management of: preliminary results (Ford et al.), 1
valve, mitral, congenital, repeated mitral valve replacement in growing child with (Nudelman et al.), 765
Dissection, aortic, intimo-intimal intussusception and other unusual manifestations of (Symbas et al.), 926
Dopamine and isoproterenol during chronic propranolol administration, hemodynamic effects of simultaneous intravenous infusion of, II. Pharmacologic antagonism of beta adrenergic blockade in dogs (Spotnitz et al.), 103
Double pacemaker implantation (Iwa et al.), 294
Drainage, venous, pulmonary, anomalous, total, unusual site of obstruction in: stenosis of coronary sinus ostium (Arciniegas et al.), 303
Duct cyst, thoracic, of mediastinum (Tsuchiya et al.), 856
Dura mater, human, and bovine aortic valves: comparative study in artificial hearts in calves (Harasaki et al.), 125
Dysfunction, cerebral, reduction of flow rate and arterial pressure at moderate hypothermia does not result in (Ellis et al.), 173
left ventricular, severe, aorta-coronary bypass grafting in patients with (Hung et al.), 718
neurologic, following cardiac operation with low-flow, low-pressure cardiopulmonary bypass (Kolkka and Hilberman), 432
renal, to acute renal failure following cardiac operation, sequential pathophysiological changes characterizing progression from (Hilberman et al.), 838
Dysplastic leaflets and small valve anulus, surgical treatment of congenital pulmonary stenosis due to (Vancini et al.), 464

E

Ebstein's anomaly, Fontan's operation for (Marcelletti et al.), 63
Echocardiography, M-mode, preoperative, as predictor of surgical results in chronic aortic insufficiency (Cunha et al.), 256
Editorial: Aortic atresia (Doty), 462
Myocardial tissue pressure (Baird), 809
Quest for ideal myocardial protection (McGoon), 150
Role of computed tomography in evaluation of intrathoracic lesions (Muhm), 469
Role of percutaneous needle biopsy in management of patients with peripheral pulmonary nodules (Baker), 161
Valve replacement should not be performed in all asymptomatic patients with severe aortic incompetence (Rahimtoola), 163
Editor's comment: An alternative viewpoint (McGoon), 169
Electrodes, pacemaker, tined, endocardial, permanent, follow-up experience with (Holmes et al.), 565
Embolism, pulmonary, chronic, surgical management of: surgical treatment and late results (Daily et al.), 523
Empyema, postpneumonectomy: cloud with silver lining? (Goldstraw), 851
Endarterectomy, carotid, and myocardial revascularization, simultaneous, experience with (Rice et al.), 922
End-diastolic volume, left ventricular, in cardiac tamponade, manifestation of marked reduction of: pulsus paradoxus (Friedman et al.), 74
Endocardial tined pacemaker electrodes, permanent, follow-up experience with (Holmes et al.), 565
Endocarditis, infective, *Aspergillus terreus*, on porcine heterograft valve (Drexler et al.), 269
Endothelial damage during preparation of saphenous veins for bypass grafting, prevention of (Bonchek), 911
Errata, 66, 446, 688, 844
Esophageal atresia, long gap: primary anastomosis after esophageal elongation by bougienage and esophagomyotomy (de Lorimier and Harrison), 138
carcinoma, treatment of: retrospective review (Schuchmann et al.), 67
pH monitoring, 24 hour, technique, indications, and clinical use of (DeMeester et al.), 656
Esophagogastric anastomotic stricture, fluoroscopic control for dilation of (Keshishian et al.), 314 (curr. tech.)
Esophagomyotomy and bougienage, primary anastomosis after esophageal elongation by: long gap esophageal atresia (de Lorimier and Harrison), 138

Esophagus and gastric cardia, carcinoma of, 20 year experience with surgical management of (Griffith and Davis), 447
mucoepidermoid and adenoid cystic carcinomas of (Bell-Thomson et al.), 438
Ethylene oxide during cardiopulmonary bypass using gas-sterilized pump components, exposure of patients to (Lindop et al.), 845
Examination, training, and certification of thoracic surgeon: position paper of American Board of Thoracic Surgery (Ellison et al.), 937
Extracorporeal circulation using membrane instead of bubble oxygenators, improved tissue perfusion (Po_2 histograms) in (Pranger et al.), 513
technology, statement on, 316

F

Failure, adrenal, acute (Gilston), 942 (letter); Reply (Alford), 942
renal, acute, following cardiac operation(s) (Gailiunas et al.), 241
sequential pathophysiological changes characterizing progression from renal dysfunction to (Hilberman et al.), 838
chronic, myocardial revascularization in patients with (Love et al.), 625
Fallot, tetralogy of, results of two-stage surgical treatment of (Arciniegas et al.), 876
with type C complete atrioventricular canal: surgical repair in three cases (Binet et al.), 761
Femorofemoral crossover graft, indication for: limb ischemia during intra-aortic balloon pumping (Alpert et al.), 729
Filter, Greenfield, versus Mobin-Uddin umbrella: continuing quest for ideal method of vena caval interruption (Cimochowski et al.), 358
Fistula(s), bronchopleural: treatment by transposition of pectoralis major muscle (Pairolero and Arnold), 142 (curr. tech.)
cardiocutaneous, long-standing, after resection of left ventricular aneurysms, management of (Stanford et al.), 789
subarachnoid-pleural: unusual complication of thoracotomy (Frantz and Battaglini), 873
Flexible linear reducer, technique for tricuspid annuloplasty with: medium-term results (Hecart et al.), 689
Flow, phasic, intraoperative, versus angiography: predictors of late aorta-coronary graft patency (Balderman et al.), 724
pulsatile, does it improve perfusion during hypothermic cardiopulmonary bypass (Singh et al.), 827
Fluoroscopic control for dilation of esophagogastric anastomotic stricture (Keshishian et al.), 314 (curr. tech.)
Fontan's operation for Ebstein's anomaly (Marcelletti et al.), 63
Fresh unstented homograft valves for replacement of aortic valve, use of: analysis of 8 years' experience (Thompson et al.), 896
Function, left ventricular, following aortic valve replacement: assessment by radionuclide ventriculography (Parker et al.), 121
during cardiopulmonary bypass, influence of prearrest factors on preservation of (Butchart et al.), 812
effect of graded narrowing of left main coronary artery on (Feldman et al.), 904
late, after aortic valve replacement, noninvasive evaluation of (Lawrence et al.), 504
after myocardial revascularization, improvement in: assessment by first-pass rest and exercise nuclear angiography (Hellman et al.), 645
Function, left ventricular—Cont'd
after preserving heart for 2 hours at 15° C (Swanson et al.), 755
mitochondrial, and ischemic contracture, correlation of (Sink et al.), 570
myocardial, regional, after bypass grafting (Moran), 794 (letter); Reply (Wechsler), 794
ventricular, following early direct aortic implantation, recovery of: anomalous left coronary artery in infant (Levitsky et al.), 598
during rest and exercise, noninvasive assessment of effects of aorta-coronary bypass grafting on (Newman et al.), 617
Functional comparison of coronary bypass grafts of saphenous vein and internal mammary artery (Myojin et al.), 713

G

Gas exchange, normal, with hemodilution in patients with pulmonary hypertension, preservation of (Ohtaka et al.), 741
-sterilized pump components, exposure of patients to ethylene oxide during cardiopulmonary bypass using (Lindop et al.), 845
Gastric cardia and esophagus, carcinoma of, 20 year experience with surgical management of (Griffith and Davis), 447
Glucose substrate in myocardial protection (Salerno et al.), 59
Graft(s), bypass, coronary, of saphenous vein and internal mammary artery, functional comparison of (Myojin et al.), 713
innominate artery–coronary artery, in patient with calcific aortitis (Weinstein and Killen), 312 (curr. tech.)
saphenous vein, and coronary arteries, percutaneous transluminal angioplasty in management of occlusive disease involving: preliminary results (Ford et al.), 1
crossover, femorofemoral, indication for: limb ischemia during intra-aortic balloon pumping (Alpert et al.), 729
patency, aorta-coronary, late, predictors of: intraoperative phasic flow versus angiography (Balderman et al.), 724
late, and symptom relief after aorta-coronary bypass (Fowler et al.), 288
Grafting, bypass, aorta-coronary, in patients with severe left ventricular dysfunction (Hung et al.), 718
on ventricular function during rest and exercise, noninvasive assessment of effects of (Newman et al.), 617
artery, coronary, and valve replacement, interstitial hydrostatic pressures in patients undergoing (Menninger et al.), 181
prevention of endothelial damage during preparation of saphenous veins for (Bonchek), 911
regional myocardial function after (Moran), 794 (letter); Reply (Wechsler), 794
Greenfield filter versus Mobin-Uddin umbrella: continuing quest for ideal method of vena caval interruption (Cimochowski et al.), 358

H

Hearing, unilateral sudden loss of: unusual complication of cardiac operation (Plasse et al.), 822
Heart(s), artificial, in calves, comparative study of: bovine aortic and human dura mater valves (Harasaki et al.), 125
based on experiences with 45 patients with Kent bundles, surgical approach to septal area of (Sealy and Gallagher), 542
disease, congenital, changing role of palliative procedures in treatment of infants with (Turley et al.), 194
with isolated ventricular septal defects, surgical anatomy and atrioventricular conduction tissues of (Milo et al.), 244

Heart(s)—Cont'd
for 2 hours at 15° C, left ventricular function after preserving (Swanson et al.), 755
Hematologic aspects of cardiotomy suction in cardiac operations (de Jong et al.), 227
Hemodilution in patients with pulmonary hypertension, preservation of normal gas exchange with (Ohtaka et al.), 741
Hemodynamic effects of simultaneous intravenous infusion of isoproterenol and dopamine during chronic propranolol administration, II. Pharmacologic antagonism of beta adrenergic blockade in dogs (Spotnitz et al.), 103
response to calcium infusion, important determinant of: plasma ionized calcium concentration (Drop and Scheidegger), 425
studies, postoperative, of 72 patients, critical analysis supported by: conservative operation for mitral insufficiency (Duran et al.), 326
Hemolysis during pulsatile perfusion: clinical evaluation of new device (Salerno et al.), 579
Hemolytic anemia with porcine xenograft aortic and mitral valves (Magilligan et al.), 628
Hemophilus influenzae purulent pericarditis in children: diagnostic and therapeutic considerations (Cheatham et al.), 933
Heparin and protamine therapy during cardiopulmonary bypass, clinical experience with activated clotting time for control of (Akl et al.), 97
Heterograft valve, porcine, *Aspergillus terreus* infective endocarditis on (Drexler et al.), 269
Histograms, Po_2 (improved tissue perfusion) in extracorporeal circulation using membrane instead of bubble oxygenators (Pranger et al.), 513
Homograft valves, unstented, fresh, for replacement of aortic valve, use of: analysis of 8 years' experience (Thompson et al.), 896
Human dura mater and bovine aortic valves: comparative study in artificial hearts in calves (Harasaki et al.), 125
Hypergammaglobulinemia, anemia, and mediastinal lymph node hyperplasia (Maier and Sommers), 860
Hyperlipoproteinemia, early and late results of coronary artery bypass in patients with (Hanson et al.), 372
Hyperplasia, lymph node, mediastinal, hypergammaglobulinemia, and anemia (Maier and Sommers), 860
Hypertension, pulmonary, indication for total correction of complete transposition of great arteries with (Bharati et al.), 890
preservation of normal gas exchange with hemodilution in patients with (Ohtaka et al.), 741
Hypoplasia of systemic ventricle in congenitally corrected transposition of great arteries: preoperative documentation and possible implications of operation (Erath et al.), 770
Hypotensive effect of plasma protein solutions by C_1esterase inhibitor, inhibition of (van der Starre et al.), 738
Hypothermia, cardiac, in man, ultrastructural and cytochemical correlates of myocardial protection by (Flameng et al.), 413
and chemical cardioplegia during ischemic cardiac arrest in dog, additive protective effects of (Rosenfeldt et al.), 29
in rat, additive protective effects of (Hearse et al.), 39
moderate, does not result in cerebral dysfunction, reduction of flow rate and arterial pressure at (Ellis et al.), 173
and potassium cardioplegia during operation for ascending aortic aneurysms, myocardial protection with (Akins et al.), 700
Hypothermic aortic occlusion, prolonged, comparison of single-dose and multiple-dose crystalloid and blood potassium cardioplegia during (Takamoto et al.), 19
cardioplegia, safety of prolonged ischemic arrest using (Engelman et al.), 705
cardiopulmonary bypass, does pulsatile flow improve perfusion during (Singh et al.), 827
potassium cardioplegia and superiority of continuous versus intermittent aortic cross-clamping, advantages of (Roberts et al.), 44

I

Immunocompromised patient, diagnostic lung biopsy in (Thomas), 471 (letter); Reply (Rossiter), 471
Implantation, aortic, direct, early, recovery of ventricular function following: anomalous left coronary artery in infant (Levitsky et al.), 598
pacemaker, double (Iwa et al.), 294
Incision, cosmetically acceptable, for median sternotomy (Laks and Hammond), 146 (curr. tech.)
Incompetence, aortic, severe, valve replacement should not be performed in all asymptomatic patients with (Rahimtoola), 163 (edit.)
valve, mitral, reconstructive surgery of: 10 year appraisal (Carpentier et al.), 338
Infancy, intrapericardial teratoma in (Arciniegas et al.), 306
results of repair of coarctation of aorta during (Williams et al.), 603
Infant(s), anomalous left coronary artery in: recovery of ventricular function following early direct aortic implantation (Levitsky et al.), 598
with congenital heart disease, changing role of palliative procedures in treatment of (Turley et al.), 194
Infarction, post–myocardial, ventricular septal defects, surgical treatment of (Naifeh et al.), 483
small bowel, complicating intra-aortic balloon counterpulsation via ascending aorta (Jarmolowski and Poirier), 735
Infective endocarditis, *Aspergillus terreus*, on porcine heterograft valve (Drexler et al.), 269
Infusion, calcium, important determinant of hemodynamic response to: plasma ionized calcium concentration (Drop and Scheidegger), 425
Inhibitor, C_1esterase, inhibition of hypotensive effect of plasma protein solutions by (van der Starre et al.), 738
Injuries, cardiac, penetrating, potential, aggressive management of (DeGennaro et al.), 833
Innominate artery–coronary artery bypass graft in patient with calcific aortitis (Weinstein and Killen), 312 (curr. tech.)
Insufficiency, aortic, chronic, preoperative M-mode echocardiography as predictor of surgical results in (Cunha et al.), 256
mitral, conservative operation for: critical analysis supported by postoperative hemodynamic studies of 72 patients (Duran et al.), 326
secondary to coronary artery disease, surgical treatment of (Kay et al.), 12
respiratory, acute, and bronchial stenosis, post-traumatic (Gomez-Engler et al.), 864
valvular, aortic, and postductal aortic coarctation in adult. Combined surgical management through median sternotomy: new surgical approach (Vijayanagar et al.), 266

Internal mammary artery and saphenous vein, functional comparison of coronary bypass grafts of (Myojin et al.), 713
Interruption, vena caval, continuing quest for ideal method of: Greenfield filter versus Mobin-Uddin umbrella (Cimochowski et al.), 358
Interstitial hydrostatic pressures in patients undergoing CABG and valve replacement (Menninger et al.), 181
Intimo-intimal intussusception and other unusual manifestations of aortic dissection (Symbas et al.), 926
Intra-aortic balloon counterpulsation via ascending aorta, small bowel infarction complicating (Jarmolowski and Poirier), 735
pumping, limb ischemia during: indication for femorofemoral crossover graft (Alpert et al.), 729
rupture of: case report (Rajani et al.), 301
Intramyocardial pressure, estimation from: supply-demand balance of subendocardial muscle (Marzilli et al.), 803
Intrapericardial teratoma in infancy (Arciniegas et al.), 306
Intrathoracic lesions, role of computed tomography in evaluation of (Muhm), 469 (edit.)
Intussusception, intimo-intimal, and other unusual manifestations of aortic dissection (Symbas et al.), 926
Ionized calcium concentration, plasma: important determinant of hemodynamic response to calcium infusion (Drop and Scheidegger), 425
Ischemia, limb, during intra-aortic balloon pumping: indication for femorofemoral crossover graft (Alpert et al.), 729
Ischemic arrest, prolonged, using hypothermic cardioplegia, safety of (Engelman et al.), 705
cardiac arrest in dog, additive protective effects of hypothermia and chemical cardioplegia during (Rosenfeldt et al.), 29
in rat, additive protective effects of hypothermia and chemical cardioplegia during (Hearse et al.), 39
contracture and mitochondrial function, correlation of (Sink et al.), 570
Isoproterenol and dopamine during chronic propranolol administration, hemodynamic effects of simultaneous intravenous infusion of, II. Pharmacologic antagonism of beta adrenergic blockade in dogs (Spotnitz et al.), 103

K

Kawasaki's disease, successful triple coronary artery bypass in child with multiple coronary aneurysms due to (Sandiford et al.), 283
Kent bundles, surgical approach to septal area of heart based on experiences with 45 patients with (Sealy and Gallagher), 542
in support of (Burchell), 637 (letter); Reply (Anderson and Becker), 639

L

Leaflets, dysplastic, and small valve anulus, surgical treatment of congenital pulmonary stenosis due to (Vancini et al.), 464
Lesions, intrathoracic, role of computed tomography in evaluation of (Muhm), 469 (edit.)
Limb ischemia during intra-aortic balloon pumping: indication for femorofemoral crossover graft (Alpert et al.), 729
Linings, collagenous, on impermeable prosthetic surfaces, development of (Bernhard et al.), 552
Lobectomy and wedge resection for carcinoma of lung, comparison of (Hoffmann and Ransdell), 211
Loss, sudden, unilateral, of hearing: unusual complication of cardiac operation (Plasse et al.), 822
Lung abscess, primary (Estrera et al.), 275
biopsy, diagnostic, in immunocompromised patient (Thomas), 471 (letter); Reply (Rossiter), 471
cancer, anterior and cervical mediastinoscopy for determining operability and predicting resectability in (Jolly et al.), 366
carcinoma of, comparison of lobectomy and wedge resection for (Hoffmann and Ransdell), 211
Lymph node hyperplasia, mediastinal, hypergammaglobulinemia, and anemia (Maier and Sommers), 860

M

Malignancies, metastatic, from distant sites to tracheobronchial tree (Baumgartner and Mark), 499
Malignant thymoma in childhood (McKenzie and Youngson), 472 (letter); Reply (Bowie et al.), 472
Mammary artery, internal, and saphenous vein, functional comparison of coronary bypass grafts of (Myojin et al.), 713
Median sternotomy, cosmetically acceptable incision for (Laks and Hammond), 146 (curr. tech.)
Mediastinal lymph node hyperplasia, hypergammaglobulinemia, and anemia (Maier and Sommers), 860
Mediastinoscopy, anterior and cervical, for determining operability and predicting resectability in lung cancer (Jolly et al.), 366
Mediastinum, thoracic duct cyst of (Tsuchiya et al.), 856
Metabolism and oxygenation, myocardial, during cardiopulmonary bypass, effects of elevated red blood cell 2,3-diphosphoglycerate concentration on (Jalonen et al.), 748
Metastatic malignancies from distant sites to tracheobronchial tree (Baumgartner and Mark), 499
Mitochondrial function and ischemic contracture, correlation of (Sink et al.), 570
Mitral annuloplasty, measured, durability of: 17 year study (Reed et al.), 321
and aortic valves, xenograft, porcine, hemolytic anemia with (Magilligan et al.), 628
insufficiency, conservative operation for: critical analysis supported by postoperative hemodynamic studies of 72 patients (Duran et al.), 326
secondary to coronary artery disease, surgical treatment of (Kay et al.), 12
valve. *See* Valve.
valvuloplasty with suture plication technique, results of (Shore et al.), 349
M-mode echocardiography, preoperative, as predictor of surgical results in chronic aortic insufficiency (Cunha et al.), 256
Mobin-Uddin umbrella versus Greenfield filter: continuing quest for ideal method of vena caval interruption (Cimochowski et al.), 358
Monitoring, pH, esophageal, 24 hour, technique, indications, and clinical use of (DeMeester et al.), 656
Mucoepidermoid and adenoid cystic carcinomas of esophagus (Bell-Thomson et al.), 438
Muscle, pectoralis major, treatment by transposition of: bronchopleural fistula (Pairolero and Arnold), 142 (curr. tech.)

Muscle—Cont'd
subendocardial, supply-demand balance of: estimation from intramyocardial pressure (Marzilli et al.), 803
Mustard or Rastelli operation, palliative, in complete transposition (Marcelletti et al.), 637 (letter)
Myocardial function, regional, after bypass grafting (Moran), 794 (letter); Reply (Wechsler), 794
infarction, post–, ventricular septal defects, surgical treatment of (Naifeh et al.), 483
intra-, pressure, estimation from: supply-demand balance of subendocardial muscle (Marzilli et al.), 803
oxygenation and metabolism during cardiopulmonary bypass, effects of elevated red blood cell 2,3-diphosphoglycerate concentration on (Jalonen et al.), 748
preservation (Tyers), 795 (letter); Reply (Foglia), 795
protection by cardiac hypothermia in man, ultrastructural and cytochemical correlates of (Flameng et al.), 413
glucose substrate in (Salerno et al.), 59
with hypothermia and potassium cardioplegia during operation for ascending aortic aneurysms (Akins et al.), 700
ideal, quest for (McGoon), 150 (edit.)
revascularization and carotid endarterectomy, simultaneous, experience with (Rice et al.), 922
early, clinicoarteriographic correlation and long-term results of: unstable angina (Ahmed et al.), 609
improvement in left ventricular function after: assessment by first-pass rest and exercise nuclear angiography (Hellman et al.), 645
in patients with chronic renal failure (Love et al.), 625
tissue pressure (Baird), 809 (edit.)

N

Narrowing, graded, of left main coronary artery on left ventricular function, effect of (Feldman et al.), 904
Needle biopsy, percutaneous, in management of patients with peripheral pulmonary nodules, role of (Baker), 161 (edit.)
Neurologic dysfunction following cardiac operation with low-flow, low-pressure cardiopulmonary bypass (Kolkka and Hilberman), 432
Node hyperplasia, lymph, mediastinal, hypergammaglobulinemia, and anemia (Maier and Sommers), 860
Nodules, pulmonary, peripheral, role of percutaneous needle biopsy in management of patients with (Baker), 161 (edit.)
Nuclear angiography, first-pass rest and exercise, assessment by: improvement in left ventricular function after myocardial revascularization (Hellman et al.), 645

O

Obstruction in total anomalous pulmonary venous drainage, unusual site of: stenosis of coronary sinus ostium (Arciniegas et al.), 303
Occlusion, aortic, hypothermic, prolonged, comparison of single-dose and multiple-dose crystalloid and blood potassium cardioplegia during (Takamoto et al.), 19
Occlusive disease involving coronary arteries and saphenous vein bypass grafts, percutaneous transluminal angioplasty in management of: preliminary results (Ford et al.), 1
Opening of aortic valve, mechanisms of (Stein), 473 (letter); Reply (Thubrikar et al.), 473
Operation, cardiac, vasopressin release during (Wu et al.), 83
Fontan's, for Ebstein's anomaly (Marcelletti et al.), 63
Mustard or Rastelli, palliative, in complete transposition (Marcelletti et al.), 637 (letter)
Orifice, atrioventricular, common, surgical anatomy of atrioventricular valve in intermediate type of (Bharati et al.), 884
Osteoplastica, tracheopathia: clinical, radiologic, and pathological correlations (Young et al.), 537
Ostium, sinus, coronary, stenosis of: unusual site of obstruction in total anomalous pulmonary venous drainage (Arciniegas et al.), 303
Output measurements, cardiac, thermodilution (Lawrie), 793 (letter); Replies (Moodie and McCormick et al.), 793
Oxygenation and metabolism, myocardial, during cardiopulmonary bypass, effects of elevated red blood cell 2,3-diphosphoglycerate concentration on (Jalonen et al.), 748
Oxygenator(s), bubble, improved tissue perfusion (Po_2 histograms) in extracorporeal circulation using membrane instead of (Pranger et al.), 513
thromboxane synthesis and platelet secretion during cardiopulmonary bypass with (Addonizio et al.), 91

P

Pacemaker electrodes, tined, endocardial, permanent, follow-up experience with (Holmes et al.), 565
implantation, double (Iwa et al.), 294
patient care, influence of telephone surveillance on (Rubin et al.), 218
Palliation, surgical, in aortic atresia (Levitsky et al.), 456
Palliative Mustard or Rastelli operation in complete transposition (Marcelletti et al.), 637 (letter)
procedures in treatment of infants with congenital heart disease, changing role of (Turley et al.), 194
Paradoxus, pulsus: manifestation of marked reduction of left ventricular end-diastolic volume in cardiac tamponade (Friedman et al.), 74
Patency, graft, aorta-coronary, late, predictors of: intraoperative phasic flow versus angiography (Balderman et al.), 724
late, and symptom relief after aorta-coronary bypass (Fowler et al.), 288
Pectoralis major muscle, treatment by transposition of: bronchopleural fistula (Pairolero and Arnold), 142 (curr. tech.)
Penetrating cardiac injuries, potential, aggressive management of (DeGennaro et al.), 833
Perfusion during hypothermic cardiopulmonary bypass, does pulsatile flow improve (Singh et al.), 827
(Po_2 histograms), tissue, improved, in extracorporeal circulation using membrane instead of bubble oxygenators (Pranger et al.), 513
pulsatile, hemolysis during: clinical evaluation of new device (Salerno et al.), 579
Pericardial, intra-, teratoma in infancy (Arciniegas et al.), 306
Pericarditis, purulent, *Hemophilus influenzae*, in children: diagnostic and therapeutic considerations (Cheatham et al.), 933
Permanent endocardial tined pacemaker electrodes, follow-up experience with (Holmes et al.), 565
pH monitoring, esophageal, 24 hour, technique, indications, and clinical use of (DeMeester et al.), 656
Pharmacologic antagonism of beta adrenergic blockade in dogs. II. Hemodynamic effects of simultaneous intravenous infusion of isoproterenol and dopamine during chronic propranolol administration (Spotnitz et al.), 103
Plasma ionized calcium concentration: important determinant of hemodynamic response to calcium infusion (Drop and Scheidegger), 425

Plasma—Cont'd
protein solutions by C_1esterase inhibitor, inhibition of hypotensive effect of (van der Starre et al.), 738
Platelet secretion and thromboxane synthesis during cardiopulmonary bypass with bubble oxygenator (Addonizio et al.), 91
Pleura, complications associated with covering bronchial stump with (Pairolero and Linos), 453
Pleural, subarachnoid-, fistula: unusual complication of thoracotomy (Frantz and Battaglini), 873
Plication technique, suture, results of mitral valvuloplasty with (Shore et al.), 349
Pneumonectomy, post-, empyema: cloud with silver lining? (Goldstraw), 851
Po_2 histograms (improved tissue perfusion) in extracorporeal circulation using membrane instead of bubble oxygenators (Pranger et al.), 513
Porcine heterograft valve, *Aspergillus terreus* infective endocarditis on (Drexler et al.), 269
xenograft aortic and mitral valves, hemolytic anemia with (Magilligan et al.), 628
Post–myocardial infarction ventricular septal defects, surgical treatment of (Naifeh et al.), 483
Postpneumonectomy empyema: cloud with silver lining? (Goldstraw), 851
Post-traumatic bronchial stenosis and acute respiratory insufficiency (Gomez-Engler et al.), 864
Potassium administration during cardiopulmonary bypass, peripheral vascular response to (Schwartz et al.), 237
cardioplegia, crystalloid and blood, single-dose and multiple-dose, during prolonged hypothermic aortic occlusion, comparison of (Takamoto et al.), 19
and hypothermia during operation for ascending aortic aneurysms, myocardial protection with (Akins et al.), 700
hypothermic, and superiority of continuous versus intermittent aortic cross-clamping, advantages of (Roberts et al.), 44
Preservation of left ventricular function during cardiopulmonary bypass, influence of prearrest factors on (Butchart et al.), 812
myocardial (Tyers), 795 (letter); Reply (Foglia), 795
Preserving heart for 2 hours at 15° C, left ventricular function after (Swanson et al.), 755
Pressure(s), arterial, and flow rate at moderate hypothermia does not result in cerebral dysfunction, reduction of (Ellis et al.), 173
hydrostatic, interstitial, in patients undergoing CABG and valve replacement (Menninger et al.), 181
intramyocardial, estimation from: supply-demand balance of subendocardial muscle (Marzilli et al.), 803
tissue, myocardial (Baird), 809 (edit.)
Primary cardiac tumors in children (Arciniegas et al.), 582
lung abscess (Estrera et al.), 275
Propranolol administration, chronic, hemodynamic effects of simultaneous intravenous infusion of isoproterenol and dopamine during, II. Pharmacologic antagonism of beta adrenergic blockade in dogs (Spotnitz et al.), 103
Prosthesis(es), valve, diagnostic method in comparative studies of: computer simulation (Engelman et al.), 402
heart, bileaflet, all–pyrolytic carbon, first clinical experience with (Hehrlein et al.), 632
Björk-Shiley, recovered at necropsy or operation, wear in (Silver), 693
mitral, in vitro assessment of (Walker et al.), 680
Prosthetic valves, malfunctioning, real-time sound spectroanalysis for diagnosis of (Kagawa et al.), 671
surfaces, impermeable, development of collagenous linings on (Bernhard et al.), 552
Protamine and heparin therapy during cardiopulmonary bypass, clinical experience with activated clotting time for control of (Akl et al.), 97
Protection, myocardial, by cardiac hypothermia in man, ultrastructural and cytochemical correlates of (Flameng et al.), 413
glucose substrate in (Salerno et al.), 59
with hypothermia and potassium cardioplegia during operation for ascending aortic aneurysms (Akins et al.), 700
ideal, quest for (McGoon), 150 (edit.)
Protein solutions, plasma, by C_1esterase inhibitor, inhibition of hypotensive effect of (van der Starre et al.), 738
Pulmonary artery diversion, right atrium–, total, surgical approach for S,L,L single ventricle incorporating (Moreno-Cabral et al.), 202
left, anomalous, management of (Phelan), 639 (letter); Reply (Arciniegas), 639
embolism, chronic, surgical management of: surgical treatment and late results (Daily et al.), 523
hypertension, indication for total correction of complete transposition of great arteries with (Bharati et al.), 890
preservation of normal gas exchange with hemodilution in patients with (Ohtaka et al.), 741
nodules, peripheral, role of percutaneous needle biopsy in management of patients with (Baker), 161 (edit.)
stenosis, congenital, due to dysplastic leaflets and small valve anulus, surgical treatment of (Vancini et al.), 464
varices, multiple, after mitral valve replacement, regression of (Shaw et al.), 117
venous connection, anomalous, partial, with sinus venosus atrial septal defect, late results following (Trusler et al.), 776
drainage, anomalous, total, unusual site of obstruction in: stenosis of coronary sinus ostium (Arciniegas et al.), 303
Pulsatile flow, does it improve perfusion during hypothermic cardiopulmonary bypass (Singh et al.), 827
perfusion, hemolysis during: clinical evaluation of new device (Salerno et al.), 579
Pulsus paradoxus: manifestation of marked reduction of left ventricular end-diastolic volume in cardiac tamponade (Friedman et al.), 74
Pump components, gas-sterilized, exposure of patients to ethylene oxide during cardiopulmonary bypass using (Lindop et al.), 845
Pumping, balloon, intra-aortic, limb ischemia during: indication for femorofemoral crossover graft (Alpert et al.), 729
Purulent pericarditis, *Hemophilus influenzae*, in children: diagnostic and therapeutic considerations (Cheatham et al.), 933
Pyrolytic carbon, all–, bileaflet heart valve prosthesis, first clinical experience with (Hehrlein et al.), 632

R

Radionuclide ventriculography, assessment by: left ventricular function following aortic valve replacement (Parker et al.), 121
Rastelli or Mustard operation, palliative, in complete transposition (Marcelletti et al.), 637 (letter)
Real-time sound spectroanalysis for diagnosis of malfunctioning prosthetic valves (Kagawa et al.), 671

Reconstructive surgery of mitral valve incompetence: 10 year appraisal (Carpentier et al.), 338
Reducer, linear, flexible, technique for tricuspid annuloplasty with: medium-term results (Hecart et al.), 689
Release, vasopressin, during cardiac operation (Wu et al.), 83
Renal dysfunction to acute renal failure following cardiac operation, sequential pathophysiological changes characterizing progression from (Hilberman et al.), 838
failure, acute, following cardiac operations (Gailiunas et al.), 241
chronic, myocardial revascularization in patients with (Love et al.), 625
Repair of coarctation of aorta during infancy, results of (Williams et al.), 603
Replacement of aortic valve and resection of ascending aortic aneurysm, concomitant: operative and long-term results with "conventional" techniques in 90 patients (Miller et al.), 388
use of fresh unstented homograft valve for: analysis of 8 years' experience (Thompson et al.), 896
valve. *See* Valve.
Resectability in lung cancer, anterior and cervical mediastinoscopy for determining operability and predicting (Jolly et al.), 366
Resection of ascending aortic aneurysm and replacement of aortic valve, concomitant: operative and long-term results with "conventional" techniques in 90 patients (Miller et al.), 388
of left ventricular aneurysms, management of long-standing cardiocutaneous fistulas after (Stanford et al.), 789
wedge, and lobectomy for carcinoma of lung, comparison of (Hoffmann and Ransdell), 211
Respiratory insufficiency, acute, and bronchial stenosis, posttraumatic (Gomez-Engler et al.), 864
Response, vascular, peripheral, to potassium administration during cardiopulmonary bypass (Schwartz et al.), 237
Return to work after coronary artery bypass operation (Niles et al.), 916
Revascularization, coronary, complete, on relief of angina, influence of (Cukingnan et al.), 188
myocardial, and carotid endarterectomy, simultaneous, experience with (Rice et al.), 922
early, clinicoarteriographic correlation and long-term results of: unstable angina (Ahmed et al.), 609
improvement in left ventricular function after: assessment by first-pass rest and exercise nuclear angiography (Hellman et al.), 645
in patients with chronic renal failure (Love et al.), 625
Rupture of intra-aortic balloon: case report (Rajani et al.), 301

S

Samson Thoracic Surgical Society: Announcement of 1980 Annual Meeting, 153, 319, 481, 643, 798
List of officers and members, 155
Program for 1980 Annual Meeting, 800
Saphenous vein(s) bypass grafts and coronary arteries, percutaneous transluminal angioplasty in management of occlusive disease involving: preliminary results (Ford et al.), 1
for bypass grafting, prevention of endothelial damage during preparation of (Bonchek), 911
and internal mammary artery, functional comparison of coronary bypass grafts of (Myojin et al.), 713
Septal area of heart based on experiences with 45 patients with Kent bundles, surgical approach to (Sealy and Gallagher), 542
Simulation, computer: diagnostic method in comparative studies of valve prostheses (Engelman et al.), 402
Single ventricle, S,L,L, incorporating total right atrium–pulmonary artery diversion, surgical approach for (Moreno-Cabral et al.), 202
Sinus ostium, coronary, stenosis of: unusual site of obstruction in total anomalous pulmonary venous drainage (Arciniegas et al.), 303
venosus atrial septal defect, late results following partial anomalous pulmonary venous connection with (Trusler et al.), 776
S,L,L single ventricle incorporating total right atrium–pulmonary artery diversion, surgical approach for (Moreno-Cabral et al.), 202
Solution, Dr. Buckberg's, is not answer to cardioplegia controversy (O'Neill et al.), 940 (letter); Reply (Buckberg), 941
Spectroanalysis, sound, real-time, for diagnosis of malfunctioning prosthetic valves (Kagawa et al.), 671
Stenosis, bronchial, and acute respiratory insufficiency, posttraumatic (Gomez-Engler et al.), 864
of coronary sinus ostium: unusual site of obstruction in total anomalous pulmonary venous drainage (Arciniegas et al.), 303
pulmonary, congenital, due to dysplastic leaflets and small valve anulus, surgical treatment of (Vancini et al.), 464
Sternotomy, median, combined surgical management through. Aortic valvular insufficiency and postductal aortic coarctation in adult: new surgical approach (Vijayanagar et al.), 266
cosmetically acceptable incision for (Laks and Hammond), 146 (curr. tech.)
Stricture, anastomotic, esophagogastric, fluoroscopic control for dilation of (Keshishian et al.), 314 (curr. tech.)
Stump, bronchial, with pleura, complications associated with covering (Pairolero and Linos), 453
Subarachnoid-pleural fistula: unusual complication of thoracotomy (Frantz and Battaglini), 873
Subendocardial muscle, supply-demand balance of: estimation from intramyocardial pressure (Marzilli et al.), 803
Substrate, glucose, in myocardial protection (Salerno et al.), 59
Suction, cardiotomy, in cardiac operations, hematologic aspects of (de Jong et al.), 227
Supply-demand balance of subendocardial muscle: estimation from intramyocardial pressure (Marzilli et al.), 803
Surfaces, prosthetic, impermeable, development of collagenous linings on (Bernhard et al.), 552
Surgeon, thoracic, training, examination, and certification of: position paper of American Board of Thoracic Surgery (Ellison et al.), 937
Surveillance, telephone, on pacemaker patient care, influence of (Rubin et al.), 218
Suture plication technique, results of mitral valvuloplasty with (Shore et al.), 349

T

Tamponade, cardiac, manifestation of marked reduction of left ventricular end-diastolic volume in: pulsus paradoxus (Friedman et al.), 74
Technology, extracorporeal, statement on, 316
Telephone surveillance on pacemaker patient care, influence of (Rubin et al.), 218
Teratoma, intrapericardial, in infancy (Arciniegas et al.), 306

Tetralogy of Fallot, results of two-stage surgical treatment of (Arciniegas et al.), 876
with type C complete atrioventricular canal: surgical repair in three cases (Binet et al.), 761
Thermodilution cardiac output measurements (Lawrie), 793 (letter); Replies (Moodie and McCormick et al.), 793
Thickness, wall, of ventricular chambers in transposition of great arteries: surgical implications (Baño-Rodrigo et al.), 592
Thoracic aortic aneurysm: natural history and treatment (Pressler and McNamara), 489
duct cyst of mediastinum (Tsuchiya et al.), 856
surgeon, training, examination, and certification of: position paper of American Board of Thoracic Surgery (Ellison et al.), 937
Thoracotomy, unusual complication of: subarachnoid-pleural fistula (Frantz and Battaglini), 873
Thromboxane synthesis and platelet secretion during cardiopulmonary bypass with bubble oxygenator (Addonizio et al.), 91
Thymoma, malignant, in childhood (McKenzie and Youngson), 472 (letter); Reply (Bowie et al.), 472
Tined pacemaker electrodes, endocardial, permanent, follow-up experience with (Holmes et al.), 565
Tissue(s), conduction, atrioventricular, and surgical anatomy of hearts with isolated ventricular septal defects (Milo et al.), 244
perfusion (Po_2 histograms), improved, in extracorporeal circulation using membrane instead of bubble oxygenators (Pranger et al.), 513
pressure, myocardial (Baird), 809 (edit.)
Tomography, computed, in evaluation of intrathoracic lesions, role of (Muhm), 469 (edit.)
Tracheobronchial tree, metastatic malignancies from distant sites to (Baumgartner and Mark), 499
Tracheopathia osteoplastica: clinical, radiologic, and pathological correlations (Young et al.), 537
Training, examination, and certification of thoracic surgeon: position paper of American Board of Thoracic Surgery (Ellison et al.), 937
Transposition of great arteries, complete, with pulmonary hypertension, indication for total correction of (Yamaki et al.), 890
congenitally corrected, hypoplasia of systemic ventricle in: preoperative documentation and possible implications of operation (Erath et al.), 770
wall thickness of ventricular chambers in: surgical implications (Baño-Rodrigo et al.), 592
of pectoralis major muscle, treatment by: bronchopleural fistula (Pairolero and Arnold), 142 (curr. tech.)
Traumatic, post-, bronchial stenosis and acute respiratory insufficiency (Gomez-Engler et al.), 864
Treatment, surgical, two-stage, of tetralogy of Fallot, results of (Arciniegas et al.), 876
Tree, tracheobronchial, metastatic malignancies from distant sites to (Baumgartner and Mark), 499
Tricuspid annuloplasty with flexible linear reducer, technique for: medium-term results (Hecart et al.), 689
Tumors, carcinoid, bronchial: 20 years' experience (Todd et al.), 532
cardiac, primary, in children (Arciniegas et al.), 582

U

Ultrastructural and cytochemical correlates of myocardial protection by cardiac hypothermia in man (Flameng et al.), 413
Umbrella, Mobin-Uddin, versus Greenfield filter: continuing quest for ideal method of vena caval interruption (Cimochowski et al.), 358
Unilateral sudden loss of hearing: unusual complication of cardiac operation (Plasse et al.), 822
Unstable angina: clinicoarteriographic correlation and long-term results of early myocardial revascularization (Ahmed et al.), 609
Unstented homograft valves, fresh, for replacement of aortic valve, use of: analysis of 8 years' experience (Thompson et al.), 896

V

Valve(s) anulus, small, and dysplastic leaflets, surgical treatment of congenital pulmonary stenosis due to (Vancini et al.), 464
aortic, mechanisms of opening of (Stein), 473 (letter); Reply (Thubrikar et al.), 473
replacement of, and resection of ascending aortic aneurysm, concomitant: operative and long-term results with "conventional" techniques in 90 patients (Miller et al.), 388
atrioventricular, in intermediate type of common atrioventricular orifice, surgical anatomy of (Bharati et al.), 884
bovine aortic and human dura mater: comparative study in artificial hearts in calves (Harasaki et al.), 125
heterograft, porcine, *Aspergillus terreus* infective endocarditis on (Drexler et al.), 269
homograft, unstented, fresh, for replacement of aortic valve, use of: analysis of 8 years' experience (Thompson et al.), 896
incompetence, mitral, reconstructive surgery of: 10 year appraisal (Carpentier et al.), 338
mitral and aortic, xenograft, porcine, hemolytic anemia with (Magilligan et al.), 628
prosthesis(es), diagnostic method in comparative studies of: computer simulation (Engelman et al.), 402
heart, bileaflet, all–pyrolytic carbon, first clinical experience with (Hehrlein et al.), 632
Björk-Shiley, recovered at necropsy or operation, wear in (Silver), 693
mitral, in vitro assessment of (Walker et al.), 680
prosthetic, malfunctioning, real-time sound spectroanalysis for diagnosis of (Kagawa et al.), 671
replacement, aortic, left ventricular function following: assessment by radionuclide ventriculography (Parker et al.), 121
noninvasive evaluation of late left ventricular function after (Lawrence et al.), 504
and CABG, interstitial hydrostatic pressures in patients undergoing (Menninger et al.), 181
mitral, regression of multiple pulmonary varices after (Shaw et al.), 117
repeated, in growing child with congenital mitral valve disease (Nudelman et al.), 765
should not be performed in all asymptomatic patients with severe aortic incompetence (Rahimtoola), 163 (edit.)
Valvular insufficiency, aortic, and postductal aortic coarctation in adult. Combined surgical management through median sternotomy: new surgical approach (Vijayanagar et al.), 266
Valvuloplasty, mitral, with suture plication technique, results of (Shore et al.), 349
Varices, pulmonary, multiple, after mitral valve replacement, regression of (Shaw et al.), 117

Vascular response, peripheral, to potassium administration during cardiopulmonary bypass (Schwartz et al.), 237
Vasopressin release during cardiac operation (Wu et al.), 83
Vein(s) bypass grafts, saphenous, and coronary arteries, percutaneous transluminal angioplasty in management of occlusive disease involving: preliminary results (Ford et al.), 1
saphenous, for bypass grafting, prevention of endothelial damage during preparation of (Bonchek), 911
and internal mammary artery, functional comparison of coronary bypass grafts of (Myojin et al.), 713
Venous connection, pulmonary, anomalous, partial, with sinus venosus atrial septal defect, late results following (Trusler et al.), 776
drainage, pulmonary, anomalous, total, unusual site of obstruction in: stenosis of coronary sinus ostium (Arciniegas et al.), 303
Ventricle, single, S,L,L, incorporating total right atrium–pulmonary artery diversion, surgical approach for (Moreno-Cabral et al.), 202
systemic, in congenitally corrected transposition of great arteries, hypoplasia of: preoperative documentation and possible implications of operation (Erath et al.), 770
Ventricular aneurysms, left, management of long-standing cardiocutaneous fistulas after resection of (Stanford et al.), 789
chambers in transposition of great arteries, wall thickness of: surgical implications (Baño-Rodrigo et al.), 592
dysfunction, left, severe, aorta-coronary bypass grafting in patients with (Hung et al.), 718
function following early direct aortic implantation, recovery of: anomalous left coronary artery in infant (Levitsky et al.), 598
left, following aortic valve replacement: assessment by radionuclide ventriculography (Parker et al.), 121
during cardiopulmonary bypass, influence of prearrest factors on preservation of (Butchart et al.), 812
effect of graded narrowing of left main coronary artery on (Feldman et al.), 904
Ventricular function, left—Cont'd
late, after aortic valve replacement, noninvasive evaluation of (Lawrence et al.), 504
after myocardial revascularization, improvement in: assessment by first-pass rest and exercise nuclear angiography (Hellman et al.), 645
after preserving heart for 2 hours at 15° C (Swanson et al.), 755
during rest and exercise, noninvasive assessment of effects of aorta-coronary bypass grafting on (Newman et al.), 617
left, end-diastolic volume in cardiac tamponade, manifestation of marked reduction of: pulsus paradoxus (Friedman et al.), 74
septal defects, isolated, surgical anatomy and atrioventricular conduction tissues of hearts with (Milo et al.), 244
post–myocardial infarction, surgical treatment of (Naifeh et al.), 483
Ventriculography, radionuclide, assessment by: left ventricular function following aortic valve replacement (Parker et al.), 121
Volume, end-diastolic, left ventricular, in cardiac tamponade, manifestation of marked reduction of: pulsus paradoxus (Friedman et al.), 74

W

Wall thickness of ventricular chambers in transposition of great arteries: surgical implications (Bãno-Rodrigo et al.), 592
Wear in Björk-Shiley heart valve prostheses recovered at necropsy or operation (Silver), 693
Wedge resection and lobectomy for carcinoma of lung, comparison of (Hoffmann and Ransdell), 211
Work after coronary artery bypass operation, return to (Niles et al.), 916

X

Xenograft aortic and mitral valves, porcine, hemolytic anemia with (Magilligan et al.), 628

The Journal of THORACIC AND CARDIOVASCULAR SURGERY

Official organ, The American Association for Thoracic Surgery and The Samson Thoracic Surgical Society

Editor DWIGHT C. McGOON, *Rochester, Minn.*

Associate editors PHILIP E. BERNATZ, *Rochester, Minn.*
MICHAEL P. KAYE, *Rochester, Minn.*

Advisory editorial board
PAUL ADKINS, *Washington, D. C.*
RALPH D. ALLEY, *Albany*
RONALD J. BAIRD, *Toronto*
EDWARD J. BEATTIE, JR., *New York*
WILLARD M. DAGGETT, *Boston*
DONALD B. DOTY, *Iowa City*
DONALD B. EFFLER, *Syracuse*
L. PENFIELD FABER, *Chicago*
HERMES C. GRILLO, *Boston*
GERARD A. KAISER, *Miami*
JOHN W. KIRKLIN, *Birmingham*
GEORGE G. LINDESMITH, *Los Angeles*
FLOYD D. LOOP, *Cleveland*
GEORGE J. MAGOVERN, *Pittsburgh*
JAMES R. MALM, *New York*
DONALD G. MULDER, *Los Angeles*
THOMAS F. NEALON, JR., *New York*
FREDERICK G. PEARSON, *Toronto*
DAVID C. SABISTON, JR., *Durham, N. C.*
J. GORDON SCANNELL, *Boston*
DAVID B. SKINNER, *Chicago*
NICHOLAS P. D. SMYTH, *Washington, D. C.*
FRANK C. SPENCER, *New York*
ALBERT STARR, *Portland*
JOE R. UTLEY, *San Diego*
V. L. WILLMAN, *St. Louis*

Editorial assistant AGNES M. OSBORN, *Rochester, Minn.*

Former Editors
EVARTS A. GRAHAM, *Editor, 1931-1957*
EMILE HOLMAN, *Editor, 1957-1962*
BRIAN BLADES, *Editor, 1962-1977*

Volume 80, July-December, 1980
The C. V. Mosby Company
St. Louis, Mo.

Volume 80
Copyright © 1980 by The C. V. Mosby Company
All rights reserved
Printed in the United States of America

Author index*

A

Åberg T, 715 (D)
Adamopoulos PN, 38
Alderman EL, 54
Allen P, 788
Amato JJ, 463 (L)
Ambrose J, 249
Ameriso JL, 206
Amplatz K, 211
Anderson GH Jr, 568
Anthopoulos LP, 38
Antonatos PG, 38
Arciniegas E, 770, 921
Arnold M, 255
Aubry P, 61

B

Bailey CP, 847 (D)
Bailey L, 289
Baker CC, 342
Barcliff LT, 718
Bargeron LM Jr, 494
Barker WL, 21
Barner HB, 50, 73, 327, 359 (D)
Barrett CT, 718
Barsamian EM, 262
Bastanier CK, 582
Beattie EJ Jr, 390, 399 (D)
Becker AE, 764
Becker H, 350
Becker RM, 613
Beckman CB, 302
Behrendt DM, 647, 655 (D)
Bender HW Jr, 544
Bendixen HH, 242
Benfield JR, 372 (D)
Bergdahl L, 177, 794
Berkowitz BA, 242
Bernatz P, 404 (D)
Beutel EW, 21
Bieber CP, 360
Biele RM, 679
Björk VO, 839 (D), 860 (D)
Blackman MS, 568
Blackstone EH, 494, 594
Blau F, 319
Blasco E, 459
Bleck PC, 861
Bolooki H, 524 (D), 832 (D)
Borkon AM, 661
Bortolotti U, 414
Boucek RJ Jr, 544
Bowen TE, 45, 605
Braimbridge MV, 525 (D), 655 (D), 874 (D)
Brewer LA, 694 (D)
Brom AG, 464 (L)
Brott WH, 45, 605
Brunswick RA, 123
Buckberg GD, 350, 525 (D)
Bulkley BH, 102
Burrows WB, 656
Burton JD, 788
Burton NA, 360
Butchart EG, 228

C

Cachera JP, 61
Caffarena JM, 941
Caldwell RL, 129
Caldwell WL, 125
Calmes S, 718
Campbell CD, 85, 280
Carpentier A, 832 (D)
Cartmill TB, 948
Castaneda AR, 485
Celermajer JM, 948
Cereda J-M, 447
Chatten J, 427
Chaux A, 800 (L), 934
Chen RYZ, 236
Cherian G, 437
Chien S, 236
Chiong MA, 929
Chitwood WR Jr, 724
Clark RE, 654 (D), 696, 701 (D)
Clarke DB, 736
Codd JE, 73, 327
Coffin LH, 637
Coggin J, 876
Colman T, 849
Cooper JD, 398 (D)
Cosgrove DM, 533 (D)
Cox JL, 373, 379 (D)
Ctercteko G, 233
Culliford AT, 866 (D), 868, 875 (D)
Cunningham WJ, 582
Cutler BS, 447

D

Daniel TM, 221, 898
Danielson GK, 141, 552
Danz N, 187
DeBakey ME, 225
de Campo T, 182
deCastro CM, 45
DeLaria GA, 861
DelRossi AJ, 945
DeMeester TR, 535
DeMeules JD, 637
Demos NJ, 679, 685 (D)
De Vega NG, 859 (D)
Dillenburg CJ, 410
Doty DB, 148, 888
Drop LJ, 441
Dufek JH, 125
Duran CG, 831 (D), 847 (D), 849, 860 (D)
Düren DR, 764

E

Eastham CL, 888
Eastridge CE, 400
Ebert PA, 517, 566 (D)
Edmunds LH Jr, 427
Edwards JE, 211
Edwards WD, 141
Einzig S, 506
Elliott DP, 792, 842
Ellis FH Jr, 677 (D)
Ellis RJ, 517, 525 (D)
Elmer EB, 102
Engelman RM, 312 (L), 654 (D)
Erath HG Jr, 544

F

Faber LP, 1
Faltas AN, 242
Farooki ZQ, 770, 921
Farrell B, 568
Faunce HF, 898
Feldt RH, 141
Fellows KE, 485
Ferguson TB, 696
Figueroa A, 849
Fisher C, 11
Fisher LD, 876
Fitzpatrick HF, 656
Flaherty JT, 102
Flehinger BJ, 390
Florence JM, 696
Foker JE, 506, 516 (D)
Fonkalsrud EW, 695 (D), 718
Force TL, 637
Ford WB, 463 (L)
Forrester-Wood CP, 406
Forshaw PL, 94
Fowler RS, 621
Frater RWM, 613, 859 (D), 873 (D)
Freedom RM, 621
Friedman S, 427
Frishman W, 613
Fritz JK, 876
Fujita T, 574
Fulton RE, 552

G

Galey JJ, 61
Gallucci V, 414
Gardner C, 517
Gardner TJ, 102
Gaskill W, 289
Gay WA, 388 (D)
Geha AS, 339 (D)
Gill C, 198
Girod DA, 129
Goldin MD, 861
Golomb HM, 535
Gomes AS, 211
Goodman AH, 187
Gordon MH, 788
Gorlin R, 249
Gott VL, 102
Graham TP Jr, 544
Gray R, 800 (L)
Green EW, 770, 921
Green GE, 340 (D)
Greenfield LJ, 293

*July, pp. 1-158; August, pp. 159-318; September, pp. 319-484; October, pp. 485-646; November, pp. 647-806; December, pp. 807-972. *Key:* In this index, (C) = commentary, (D) = discussion, and (L) = letter to the Editor.

Grëate GJ, 228, 232 (L)
Grubb C, 11
Grunkemeier GL, 834
Grzelak L, 319
Gundry SR, 661, 668 (D)

H

Haglin JJ, 754
Hakimi M, 770, 921
Haller JD, 832 (D)
Halseth WL, 792, 842, 848 (D)
Hammon JW Jr, 544, 551 (D)
Hancock JB, 94
Hardy JD, 397 (D)
Harima R, 629
Harken AH, 527, 533 (D), 779
Harken DE, 840 (D)
Harlan BJ, 834
Harris P, 431
Harris SS, 410
Hartzler GO, 153
Hashim GA, 656
Head RJ, 242
Hehrlein FW, 800 (L)
Hellenbrand WE, 782
Heller G, 232 (L)
Hellman C, 319
Helseth HK, 754
Herman MV, 249
Hess ML, 293
Hessell EA II, 111
Hetzer R, 389 (D), 653 (D)
Hiebert C, 677 (D)
Hill RC, 724
Hoar PF, 242
Hoffmann TH, 348 (D)
Hong R, 125
Horowitz LN, 527, 779
Hughes L, 334
Hughes RK, 684 (D)
Humphrey EW, 400
Humphreys GH II, 686, 695 (D)
Hunter JA, 861
Hurley F, 302
Hurwitz RA, 129

I

Idriss FS, 582
Ihara K, 629
Ivey TD, 111
Iwa T, 271
Iwase T, 271
Izukawa T, 381

J

Jacob CO, 217
Jacobson J, 289
James EC, 410
James TN, 750
Jamieson SW, 360
Jara FM, 28
Jaretzki A III, 686, 700 (D)
Javid H, 861
Jefferson KE, 909
Jensik RJ, 1
Jochim K, 647
John S, 437
Johnson DC, 948
Johnson DD, 111
Johnson WD, 319
Johnson WD Jr, 31
Jones E, 886 (D)
Jones JW, 334, 341 (D)
Josephson ME, 527, 779
Juvin AM, 61

K

Kahn DR, 125
Kaiser GA, 182, 866 (D)
Kaiser GC, 73, 327, 876
Karaffa S, 262
Karasik A, 217
Kaunitz VH, 677 (D)
Kawachi K, 629
Kawashima Y, 574, 629
Kawasuji M, 271
Kay JH, 49 (C)
Kaye MP, 44 (C), 94
Keane JF, 485
Keehn RJ, 400
Kennedy J, 678 (D), 831 (D)
Kennedy JW, 876, 887 (D)
Kennedy MA, 702
Kennedy RH, 702, 707 (D)
Kenning B, 11
Khuri SF, 262
Killen DA, 255
Kindred L, 255
King H, 129
Kirchner PT, 535
Kirklin JK, 485
Kirklin JW, 494, 565 (D), 594
Kirschner PA, 397 (D)
Kirsh M, 647
Kitamura S, 629
Kittle CF, 1
Kleinman C, 782
Kleinman LH, 724
Kloner RA, 262
Kolenda DR, 125
Kouchoukos NT, 340 (D)
Krause SM, 293
Krishnaswamy S, 437

L

Laas J, 85, 280
Laks H, 464 (L), 655 (D), 782
Lambert LE, 834
Lamberti JJ, 187
Langston HT, 21
Lauer RM, 148
Laughlin EH, 17
Laughlin L, 289
Laura JP, 312 (L)
Lawrence GH, 716 (D)
Lawrie GM, 225
Lazar HL, 350, 359 (D), 516 (D)
Lee ME, 934
Lemole GM, 945
Levitsky S, 302
Lewis JF Jr, 28
Lieberman Y, 217
Lillehei CW, 371 (D)
Lin YT, 613
Lincoln JCR, 11
Litwak RS, 249
Ljungqvist A, 177
Loeffler T, 187
Lofland GK, 373
Loisance DY, 61
Lolley DM, 707 (D)
Long DM Jr, 701 (D)
Loop FD, 198, 340 (D)
Losekoot TG, 764
Love JW, 68
Lowe JE, 221
Lucas RV Jr, 211
Lucas SK, 102

M

McConahay DR, 255
Mace JG, 54
Mack JW, 8
McGoon DC, 313 (L), 552, 702
McIntosh CL, 661
Macmanus Q, 834
Magara T, 271
Magilligan DJ Jr, 28, 831 (D), 874 (D)
Mair DD, 552
Malm JR, 707 (D)
Maloney JV Jr, 653 (D)
Mammana R, 302
Manabe H, 574
Manganaro AM, 350
Mani GK, 437
Manning J, 431
Marbarger JP, 696
Marcelletti C, 764
Marco JD, 50
Marcus ML, 885
Marques JL, 941
Martini N, 390, 404 (D)
Marvin WJ Jr, 148
Masur H, 31
Matsui K, 135
Matthews M, 400
Mavroudis C, 342, 349 (D), 517
Maynard C, 876
Mazzera E, 764
Meng RL, 1
Midwall J, 249
Milano A, 414
Miller DC, 54, 760, 824
Miller DW Jr, 111
Mills NL, 334, 708, 717 (D)
Mindich B, 249
Misaki T, 271
Misiraca U, 187
Modan M, 217
Mok CK, 233
Monson BK, 754
Moodie DS, 198
Moore CH, 885 (D)
Moran JM, 532 (D)
Morch JE, 171
Moreno NN, 182
Moreno-Cabral RJ, 54, 760, 824
Mori T, 629
Morrow AG, 661
Morse D, 945
Mortensen JD, 642 (L)
Moulder PV, 543 (D)
Moulopoulos SD, 38
Moynihan PC, 123
Mudd JG, 876
Munther AS, 656
Muralidharan S, 437
Muster AJ, 582
Myerowitz PD, 535
Myers W, 876

N

Naito Y, 574
Najafi H, 861
Nakano E, 135
Nakano S, 629
Nanas JN, 38
Nath PH, 211
Nauss LA, 308
Nicoloff DM, 211
Nobrega FT, 702
Norwood WI, 485

O

Ochsner JL, 334, 708
Ogawa J, 600
Oka Y, 613
Olivet RT, 308
Olley PM, 171, 381
Olthof H, 764
Orringer MB, 667 (D), 669, 678 (D)
Otero Coto E, 941
Oxford DE, 535
Oyer PE, 54, 824, 832 (D)

P

Pacifico AD, 494
Padilla J, 459
Pallares VS, 182
Panizzon G, 414
París F, 459
Parker EF, 398 (D)
Parker FB Jr, 568, 573 (D)
Parr GVS, 79
Pastor J, 459
Paul MH, 582
Paulson DM, 453
Payne WS, 308

Pennington DG, 73, 327
Pennock JL, 360
Perry BL, 770, 921
Peters JL, 11
Pichard AD, 249
Pick RL, 85
Piehler JM, 552, 566 (D)
Pierce WS, 79
Pluth JR, 702
Pomar JL, 849
Pomerantz M, 348 (D)
Poulain H, 61
Prodromos CC, 102

R

Raabe DS Jr, 637
Rahimtoola SH, 312 (L)
Ramey WG, 656
Rashkind WJ, 427
Rasi A, 289
Ravelo HR, 427
Reed WA, 255
Reitz BA, 54, 360, 372, (D), 824
Relland J, 859 (D)
Replogle RL, 85, 280
Revuelta JM, 849
Richer C, 221
Riopel DA, 424
Rizzoli G, 494
Robert EW, 54
Roberts AJ, 654 (D)
Roberts JD, 21
Robicsek F, 694 (D), 866 (D)
Roe BB, 716 (D), 847 (D)
Roe JP, 8
Roon AJ, 342
Roper CL, 696
Rose GP, 187
Rosenberg G, 79
Rossiter SJ, 54
Rowe RD, 171, 621
Ryan TJ, 876

S

Sabiston DC, 532 (D), 724
Sade RM, 424
Salerno TA, 929
Samson PC, 25
Sandor GGS, 171
Saravalli OA, 909
Scannell JG, 904
Scheidegger D, 441
Schieken RM, 148
Schmidt DH, 319
Scott SM, 453
Seaber AV, 742
Sealy WC, 379 (D), 742
Sebel PS, 764
Senning A, 389 (D)
Serry C, 861, 867 (D)
Sese A, 135
Sethi GK, 453
Seyfer AE, 605
Shapira N, 647
Shaw RC, 874 (D)
Sheldon WC, 198
Shields TW, 400, 405 (D)
Shimazaki Y, 629
Shinn JA, 760
Shirley JH, 8
Shohzu A, 600
Shumway NE, 54, 360, 760, 824
Singh A, 211
Sink JD, 724
Skinner DB, 676 (D), 684 (D)
Sloan H, 159
Smith CW, 544
Smith EA, 842
Smith RH, 898
Smith W, 129
Somerville J, 909
Sondheimer HM, 568
Spagna PM, 945
Spencer FC, 717 (D), 847 (D), 868
Spodick DH, 312 (L)
Spratt JA, 696
Stallone R, 348 (D)
Standeven JW, 50
Starr A, 834, 840 (D)
Stephenson LW, 427
Stewart S, 431
Stiles QR, 886 (D)
Stinson EB, 54, 360, 760, 824
Stone JG, 242
Stoney WS, 716 (D)
Streeten DHP, 568
Strom J, 613
Struble RA, 125
Such M, 941
Sutherland HD, 808
Sutton RB, 54
Swanson DK, 125
Swistel AJ, 656
Sylvest VM, 898

T

Takanashi Y, 85, 280
Takeda Y, 135
Talner NS, 782
Tanaka J, 135
Tarazona V, 459
Taylor AB, 424
Tector AJ, 339 (D)
Teply JF, 834
Tharion J, 948
Thiene G, 414
Thomas FJ, 125
Thomas AN, 342
Thomas S, 868
Tokunaga K, 135
Tow D, 262
Trusler GA, 171, 381, 389 (D), 621
Tsagaris TJ, 54
Tumeo AR, 187
Turley K, 517, 551 (D)
Turner SW, 187
Tyras DH, 73, 327, 340 (D)

U

Ubago JL, 849
Ullyot D, 517, 532 (D)
Ungerleider RM, 373
Urthaler F, 750
Utley JR, 349 (D)

V

Vander Salm TJ, 447
Vidas M, 427

W

Waldhausen JA, 79
Waldman JD, 187
Walker EL, 792, 842
Walker WY, 17
Wallace RB, 552
Walters MB, 788
Wang T, 506
Wareham E, 289
Webb WR, 123
Wechsler AS, 724
Weldon CS, 696
Wernly JA, 206, 535, 543 (D)
Wessel HU, 582
West PN, 696
Wicks AE, 236
Wickstrom PH, 754
Wilcox WD, 141
Williams JM, 373
Williams WG, 171, 381, 621
Willis W, 289
Willman VL, 73, 327
Wolfe WG, 221
Wright CB, 888, 897

Y

Yamazaki S, 600
Yamazaki Y, 600
Yasuda T, 262
Yasui H, 135
Yellin EL, 613
Young JN, 25

Z

Zajtchuk R, 45, 605
Zaman MB, 390
Zarza AG, 459

Subject index*

A

Accessory conduction pathway in Wolff-Parkinson-White syndrome, localization and interruption of (Iwa et al.), 271
flaplike tissue causing ventricular outflow obstruction (Gomes et al.), 211
Activity, beta adrenergic, and calcium ion concentration: studies in anesthetized, intact dog (Scheidegger and Drop), 441
Adenosine metabolism and myocardial preservation: consequences of adenosine catabolism on myocardial high-energy compounds and tissue blood flow (Foker et al.), 506
Adrenergic activity, beta, and calcium ion concentration: studies in anesthetized, intact dog (Scheidegger and Drop), 441
and hemodynamic responses to anesthesia and operation for myocardial revascularization (Hoar et al.), 242
Afterload reduction with hydralazine following valve replacement (Marco et al.), 50
Air embolism, massive, during cardiopulmonary bypass: causes, prevention, and management (Mills and Ochsner), 708
embolization during cannulation of ascending aorta, risk factors for (Beckman et al.), 302 (curr. tech.)
Allotransplantation and autotransplantation in primates with extended survival: heart and lung transplantation (Reitz et al.), 360
Amino acids during reperfusion, myocardial energy replenishment and reversal of ischemic damage by substrate enhancement of secondary blood cardioplegia with (Lazar et al.), 350
American Association for Thoracic Surgery: Announcement of 1981 Annual Meeting, 156, 316, 482, 643, 803, 951
Annual meeting notes, 314
Graham Traveling Fellowship, 158, 318, 484
Roster of members, 465
Board of Thoracic Surgery: Notice of certifying examination, 157, 317, 483, 646, 806, 954
Notice of recertification examination, 157, 317, 483, 646, 806, 954
See Let us now praise famous men (Sloan), 159 (Presidential Address)
Analgesia, nerve block, intercostal, continuous, following thoracotomy, technique for (Olivet et al.), 308 (curr. tech.)
Analysis, discriminant, multivariate, of clinical and angiographic predictors of operative mortality from Collaborative Study in Coronary Artery Surgery (CASS), (Kennedy et al.), 876
Anesthesia and operation for myocardial revascularization, hemodynamic and adrenergic responses to (Hoar et al.), 242
Anesthetic gases, heated and humidified, reduction of operative heat loss and pulmonary secretions in neonates by use of (Fonkalsrud et al.), 718
Aneurysm(s), aortic root, results of composite graft replacement for (Helseth et al.), 754
false, postoperative, of left ventricle and obstruction of left circumflex coronary artery complicating enlargement of restrictive ventricular septal defect in double-outlet right ventricle (Edwards et al.), 141
left ventricular, right ventricular failure after repair of (Parr et al.), 79
mycotic, intracerebral, and infective endocarditis, operative experience with (Jara et al.), 28
Aneurysmectomy, standard, and aneurysmectomy with directed endocardial resection for treatment of recurrent sustained ventricular tachycardia, comparison of (Harken et al.), 527
Angina, Ludwig's, extrapleural empyema thoracis as direct extension of: case report (Young and Samson), 25
Angioplasty, transluminal, successful, of totally occluded grafts (Ford), 463 (letter)
Anomalous left main coronary artery originating from right sinus of Valsalva: pathophysiology, angiographic definition, and surgical approaches (Moodie et al.), 198
pulmonary venous connection, total, in infancy: 10 years' experience including studies of postoperative ventricular function (Hammon et al.), 544
Antibiotic prophylaxis, short-term, Candida esophagitis following cardiac operation and (Gundry et al.), 661
Aorta, ascending, risk factors for air embolization during cannulation of (Beckman et al.), 302 (curr. tech.)
coarctation of, hypertensive mechanisms in: further studies of renin-angiotensin system (Parker et al.), 568
by patch grafting, long-term results after repair of (Bergdahl and Ljungqvist), 177
noninvasive physiological assessment in infants and children before and after operation (Waldman et al.), 187

*July, pp. 1-158; August, pp. 159-318; September, pp. 319-484; October, pp. 485-646; November, pp. 647-806; December, pp. 807-972.

Aorta, ascending—Cont'd
technical and pharmacologic management of distal hypotension during repair of (Moreno et al.), 182
-esophageal fistula induced by foreign body: first recorded survival (Ctercteko and Mok), 233
–right atrial communication: report of unusual case (Otero Coto et al.), 941
Aortic homografts used for reconstruction of right ventricular outflow tract, calcification of (Saravalli et al.), 909
intra-, closure of calcified patent ductus: new operative method not requiring cardiopulmonary bypass (Wernly and Ameriso), 206
position, calcific stenosis of glutaraldehyde-treated porcine bioprosthesis in (Gordon et al.), 788
hemodynamic and clinical comparison of Hancock modified orifice and standard orifice bioprostheses in (Rossiter et al.), 54
regurgitation, intra-aortic balloon pump for relief of: experimental study (Moulopoulos et al.), 38
root aneurysms, results of composite graft replacement for (Helseth et al.), 754
stenosis, valvular, congenital, in children, long-term follow-up of patients after valvotomy for: clinical and actuarial follow-up (Sandor et al.), 171
valve replacement without continuous coronary perfusion, coronary ostial stenosis following (Force et al.), 637
Arrest, cardiac, perioperative, and coronary artery spasm (Pichard et al.), 249
cardioplegic, in pigs: effects of glucose-containing solutions (Salerno and Chiong), 929
Arrhythmias, atrioventricular, and concentration of K^+ ion in cardioplegic solution, relationship between (Ellis et al.), 517
supraventricular, new technique for treatment of: left atrial isolation (Williams et al.), 373
Arterial repair, trans–pulmonary, of supracristal ventricular septal defects in infancy (Tharion et al.), 948 (curr. tech.)
Arteritis, coronary, of mucocutaneous lymph node syndrome, severe mitral regurgitation due to: new surgical entity (Kitamura et al.), 629
Artery(ies). *See also* specific arteries.
balloon counterpulsation, pulmonary, for acute right ventricular failure (Miller et al.), 760
great, transposition of, isolated, current results with Mustard operation in (Trusler et al.), 381
Atresia, pulmonary, with ventricular septal defect and hypoplastic pulmonary arteries by right ventricular outflow construction, management of (Piehler et al.), 552
tricuspid, transposition of great arteries, and banded pulmonary artery: repair by arterial switch, coronary artery reimplantation, and right atrioventricular valved conduit (Freedom et al.), 621
Atrial communication, aorta–right: report of unusual case (Otero Coto et al.), 941
isolation, left: new technique for treatment of supraventricular arrhythmias (Williams et al.), 373
–left ventricular conduit, left, for relief of congenital mitral stenosis in infancy (Laks et al.), 782
septum from atria, surgical isolation of: identification of atrial septal pacemaker (Sealy and Seaber), 742
and ventricular implantation, transvenous, electrode suitable for, Helifix (Bergdahl), 794 (curr. tech.)
Atrioventricular arrhythmias and concentration of K^+ ion in cardioplegic solution, relationship between (Ellis et al.), 517
valved conduit, right, arterial switch, and coronary artery reimplantation, repair by: tricuspid atresia, transposition of great arteries, and banded pulmonary artery (Freedom et al.), 621
Atria, surgical isolation of atrial septum from: identification of atrial septal pacemaker (Sealy and Seaber), 742
Australia, metamorphosis of cardiac surgery in (Sutherland), 808 (Honored Speaker's Address)
Autotransplantation and allotransplantation in primates with extended survival: heart and lung transplantation (Reitz et al.), 360

B

Balloon counterpulsation, pulmonary artery, for acute right ventricular failure (Miller et al.), 760
failure (Heller), 232 (letter); Reply (Grötte), 232
flotation catheters, pulmonary hemorrhage associated with: report of case and review of literature (Paulson et al.), 453
intra-aortic, due to dislocation of central stylet, impaction of (Grötte and Butchart), 228
pump, intra-aortic, for relief of aortic regurgitation: experimental study (Moulopoulos et al.), 38
pumping, intra-aortic, to reduce experimental myocardial infarct size in swine, failure of (Laas et al.), 85
Banded pulmonary artery, tricuspid atresia, and transposition of great arteries: repair by arterial switch, coronary artery reimplantation, and right atrioventricular valved conduit (Freedom et al.), 621
Banding, pulmonary artery, analysis of current risks, results, and indications (Stewart et al.), 431
Beta adrenergic activity and calcium ion concentration: studies in anesthetized, intact dog (Scheidegger and Drop), 441
Bioprosthesis(es), Hancock, pathological substrates of thrombus formation after heart valve replacement with (Thiene et al.), 414
modified orifice and standard orifice, Hancock, in aortic position, hemodynamic and clinical comparison of (Rossiter et al.), 54
porcine, glutaraldehyde-treated, in aortic position, calcific stenosis of (Gordon et al.), 788
Bioprosthetic valve, porcine, Hancock, clinical durability of (Oyer et al.), 824
Bleb carcinoma of lung (Scannell), 904
Block analgesia, nerve, intercostal, continuous, following thoracotomy, technique for (Olivet et al.), 308 (curr. tech.)
Blood cardioplegia to crystalloid cardioplegia on myocardial contractility in man, comparison of effect of (Shapira et al.), 647
secondary, with amino acids during reperfusion, myocardial energy replenishment and reversal of ischemic damage by substrate enhancement of (Lazar et al.), 350
flow, intramyocardial, with xenon 127, determination of: new radionuclide with potential intraoperative application (Khuri et al.), 262
tissue, and myocardial high-energy compounds, consequences of adenosine catabolism on: adenosine metabolism and myocardial preservation (Foker et al.), 506
Bone marrow, donor, and total lymphoid irradiation in mongrel dogs, heart and kidney transplantation using (Kahn et al.), 125

Brachial plexus injury following median sternotomy (Vander Salm et al.), 447
Brom submammarian incision for median sternotomy (Amato), 463 (letter); Reply (Laks), 464
Bronchogenic carcinoma, clinical value of quantitative ventilation-perfusion lung scans in surgical management of (Wernly et al.), 535
Bronchopleural fistula following pneumonectomy for carcinoma of bronchus: mechanical stapling versus hand suturing (Forrester-Wood), 406
Bronchus(i), carcinoma of, bronchopleural fistula following pneumonectomy for: mechanical stapling versus hand suturing (Forrester-Wood), 406
main, and trachea, palliative intubation of (Clarke), 736
Bubble versus membrane oxygenator for cardiac operations: prospective randomized study (Hessel et al.), 111
Bullet embolus to right ventricle, percutaneous transvenous removal of (Hartzler), 153
Bypass, cardiopulmonary, massive air embolism during: causes, prevention, and management (Mills and Ochsner), 708
new operative method not requiring: intra-aortic closure of calcified patent ductus arteriosus (Wernly and Ameriso), 206
coronary artery, canine, Gore-Tex (polytetrafluoroethylene) in (Hancock et al.), 94
grafts to left anterior descending coronary artery: saphenous vein versus internal mammary artery (Tyras et al.), 327
mammary and vein, isoproterenol-induced flow responses in (Schmidt et al.), 319
left ventricular, transapical, oxygen consumption of left ventricle during (Laas et al.), 280
operations, coronary, and some cost considerations, employment status after (Love), 68
systems, cardiopulmonary, Phase I study of (Mortensen), 642 (letter)

C

Calcific stenosis of glutaraldehyde-treated porcine bioprosthesis in aortic position (Gordon et al.), 708
Calcification of aortic homografts used for reconstruction of right ventricular outflow tract (Saravalli et al.), 909
Calcified patent ductus, intra-aortic closure of: new operative method not requiring cardiopulmonary bypass (Wernly and Ameriso), 206
Calcium ion concentration and beta adrenergic activity: studies in anesthetized, intact dog (Scheidegger and Drop), 441
Cancer, lung, in patients with chondromatous hamartoma, increased risk of (Karasik et al.), 217
Candida esophagitis following cardiac operation and short-term antibiotic prophylaxis (Gundry et al.), 661
Cannulation of ascending aorta, risk factors for air embolization during (Beckman et al.), 302 (curr. tech.)
Carcinoma(s), bronchogenic, clinical value of quantitative ventilation-perfusion lung scans in surgical management of (Wernly et al.), 535
of bronchus, bronchopleural fistula following pneumonectomy for: mechanical stapling versus hand suturing (Forrester-Wood), 406
of lung, bleb (Scannell), 904
lung, 445, with mediastinal lymph node metastases, prospective study of (Martini et al.), 390
Carcinoma(s), lung—Cont'd
by preoperative assay of lung tumor antigen–sensitive T lymphocytes, diagnosis, stage, and prognosis of (Ramey et al.), 656
resected, pathological stage grouping of patients with (Shields et al.), 400
Cardiac arrest, perioperative, and coronary artery spasm (Pichard et al.), 249
intra-, repair, exercise performance in tetralogy of Fallot after (Wessel et al.), 582
operation(s), membrane versus bubble oxygenator for: prospective randomized study (Hessel et al.), 111
newly recognized hazard during: fulminating noncardiogenic pulmonary edema (Culliford et al.), 868
and short-term antibiotic prophylaxis, Candida esophagitis following (Gundry et al.), 661
using sonomicrometry, measurement of global ventricular function in patients during (Chitwood et al.), 724
surgery in Australia, metamorphosis of (Sutherland), 808 (Honored Speaker's Address)
trends in: 5 year study of defined population (Kennedy et al.), 702
Cardiogenic, non-, pulmonary edema, fulminating: newly recognized hazard during cardiac operations (Culliford et al.), 868
Cardioplegia, blood, to crystalloid cardioplegia on myocardial contractility in man, comparison of effect of (Shapira et al.), 647
secondary, with amino acids during reperfusion, myocardial energy replenishment and reversal of ischemic damage by substrate enhancement of (Lazar et al.), 350
cold, comparison of local hypothermia with and without: myocardial preservation (Laughlin et al.), 289
potassium, multiple-dose, on myocardial ischemia, return of ventricular function, and ultrastructural preservation, effect of (Lucas et al.), 102
Cardioplegic arrest in pigs: effects of glucose-containing solutions (Salerno and Chiong), 929
hypothermic protection of global ischemic canine myocardium, assessment of (Hess et al.), 293
solution, relationship between atrioventricular arrhythmias and concentration of K^+ ion in (Ellis et al.), 517
Cardiopulmonary bypass, massive air embolism during: causes, prevention, and management (Mills and Ochsner), 708
systems, Phase I study of (Mortensen), 642 (letter)
CASS (Collaborative Study in Coronary Artery Surgery), multivariate discriminant analysis of clinical and angiographic predictors of operative mortality from (Kennedy et al.), 876
Catabolism, adenosine, on myocardial high-energy compounds and tissue blood flow, consequences of: adenosine metabolism and myocardial preservation (Foker et al.), 506
Catheters, flotation, balloon, pulmonary hemorrhage associated with: report of case and review of literature (Paulson et al.), 453
Celestin tube, fragmentation of: cause of fatal intestinal perforation (Laughlin and Walker), 17
Cervical esophagomyotomy, extended, for cricopharyngeal dysfunction (Orringer), 669
Cervicothoracic vascular injuries, acute, management of (Mavroudis et al.), 342

Children and infants before and after operation, noninvasive physiological assessment in: coarctation of aorta (Waldman et al.), 187
long-term follow-up of patients after valvotomy for congenital valvular aortic stenosis in: clinical and actuarial follow-up (Sandor et al.), 171
pulmonary tuberculosis in (Lowe et al.), 221
with Turner's syndrome, coarctation resection in: note of caution (Ravelo et al.), 427
Chondromatous hamartoma, increased risk of lung cancer in patients with (Karasik et al.), 217
Closure, intra-aortic, of calcified patent ductus: new operative method not requiring cardiopulmonary bypass (Wernly and Ameriso), 206
surgical, of ventricular septal defect during first twelve months of life (Arciniegas et al.), 921
Coarctation of aorta, hypertensive mechanisms in: further studies of renin-angiotensin system (Parker et al.), 568
noninvasive physiological assessment in infants and children before and after operation (Waldman et al.), 187
by patch grafting, long-term results after repair of (Bergdahl and Ljungqvist), 177
technical and pharmacologic management of distal hypotension during repair of (Moreno et al.), 182
resection in children with Turner's syndrome: note of caution (Ravelo et al.), 427
Cold cardioplegia, comparison of local hypothermia with and without: myocardial preservation (Laughlin et al.), 289
Collaborative Study in Coronary Artery Surgery (CASS), multivariate discriminant analysis of clinical and angiographic predictors of operative mortality from (Kennedy et al.), 876
Commissurotomy, mitral, open: modern re-evaluation (Halseth et al.), 842
Communication, aorta–right atrial: report of unusual case (Otero Coto et al.), 941
Complications, unusual, of endocardial pacing (Lee and Chaux), 934
wound, sternal: management and results (Serry et al.), 861
Conduction pathway, accessory, in Wolff-Parkinson-White syndrome, localization and interruption of (Iwa et al.), 271
Conduit, left atrial–left ventricular, for relief of congenital mitral stenosis in infancy (Laks et al.), 782
valved, atrioventricular, right, arterial switch, and coronary artery reimplantation, repair by: tricuspid atresia, transposition of great arteries, and banded pulmonary artery (Freedom et al.), 621
Congenital heart disease, progress in (Laura), 312 (letter); Reply (McGoon), 313
mitral stenosis in infancy, left atrial–left ventricular conduit for relief of (Laks et al.), 782
valvular aortic stenosis in children, long-term follow-up of patients after valvotomy for: clinical and actuarial follow-up (Sandor et al.), 171
Connection, venous, pulmonary, anomalous, total, in infancy: 10 years' experience including studies of postoperative ventricular function (Hammon et al.), 544
Consumption, oxygen, of left ventricle during transapical left ventricular bypass (Laas et al.), 280
Contractility, myocardial, in man, comparison of effect of blood cardioplegia to crystalloid cardioplegia on (Shapira et al.), 647
Coronary arteritis of mucocutaneous lymph node syndrome, severe mitral regurgitation due to: new surgical entity (Kitamura et al.), 629
artery, abnormal, tetralogy of Fallot with: 1967 to 1977 (Hurwitz et al.), 129
bypass, canine, Gore-Tex (polytetrafluoroethylene) in (Hancock et al.), 94
circumflex, left, obstruction of, and postoperative false aneurysm of left ventricle complicating enlargement of restrictive ventricular septal defect in double-outlet right ventricle (Edwards et al.), 141
disease, left main, surgical therapy for (Killen et al.), 255
single-vessel, symptomatic, rationale for operative therapy of (Tyras et al.), 73
left anterior descending, bypass grafts to: saphenous vein versus internal mammary artery (Tyras et al.), 327
main, anomalous, originating from right sinus of Valsalva: pathophysiology, angiographic definition, and surgical approaches (Moodie et al.), 198
reimplantation, arterial switch, and right atrioventricular valved conduit, repair by: tricuspid atresia, transposition of great arteries, and banded pulmonary artery (Freedom et al.), 621
–to–right pulmonary artery fistula, right: surgical correction (DeBakey and Lawrie), 225
spasm and perioperative cardiac arrest (Pichard et al.), 249
Surgery (CASS), Collaborative Study in, multivariate discriminant analysis of clinical and angiographic predictors of operative mortality from (Kennedy et al.), 876
bypass operations and some cost considerations, employment status after (Love), 68
graft, clinical comparison between patients with saphenous vein and internal mammary artery as (Jones et al.), 334
ostial stenosis following aortic valve replacement without continuous coronary perfusion (Force et al.), 637
reactive hyperemia with Doppler probe, measurements of: intraoperative guide to hemodynamically significant lesions (Wright et al.), 888
Correction, total, of tetralogy of Fallot, early and late results of (Arciniegas et al.), 770
Correspondence
Balloon failure (Heller), 232
Reply (Grötte), 232
Brom submammarian incision for median sternotomy (Amato), 463
Reply (Laks), 464
Phase I study of CPB systems (Mortensen), 642
Progress in congenital heart disease (Laura), 312
Reply (McGoon), 313
St. Jude Medical prosthesis (Chaux and Gray), 800
Reply (Hehrlein), 800
Submammarian incision (Brom), 464
Reply (Laks), 464
Successful transluminal angioplasty of totally occluded grafts (Ford), 463
Universal valve replacement (Spodick), 312
Reply (Rahimtoola), 312
Valve replacement versus medical therapy (Engelman), 312
Reply (Rahimtoola), 312
Cost considerations, some, employment status after coronary bypass operations and (Love), 68

Cough pressure, intrapleural, in patients after thoracotomy (Yamazaki et al.), 600
Counterpulsation, balloon, pulmonary artery, for acute right ventricular failure (Miller et al.), 760
Cricopharyngeal dysfunction, extended cervical esophagomyotomy for (Orringer), 669
Crystalloid cardioplegia to blood cardioplegia on myocardial contractility in man, comparison of effect of (Shapira et al.), 647

D

Damage, ischemic, reversal of, and myocardial energy replenishment by substrate enhancement of secondary blood cardioplegia with amino acids during reperfusion (Lazar et al.), 350
Defect(s), septal, ventricular, after acute myocardial infarction: early repair (Loisance et al.), 61
during first twelve months of life, surgical closure of (Arciniegas et al.), 921
and hypoplastic pulmonary arteries by right ventricular outflow construction, management of pulmonary atresia with (Piehler et al.), 552
incremental risk factors in hospital mortality rate after repair of (Rizzoli et al.), 494
multiple, surgical management of (Kirklin et al.), 485
restrictive, in double-outlet right ventricle, postoperative false aneurysm of left ventricle and obstruction of left circumflex coronary artery complicating enlargement of (Edwards et al.), 141
supracristal, in infancy, trans–pulmonary arterial repair of (Tharion et al.), 948 (curr. tech.)
Disease, coronary artery, left main, surgical therapy for (Killen et al.), 255
single-vessel, symptomatic, rationale for operative therapy of (Tyras et al.), 73
heart, congenital, progress in (Laura), 312 (letter); Reply (McGoon), 313
malignant, total sternectomy for (París et al.), 459 (curr. tech.)
Doppler probe, measurements of coronary reactive hyperemia with: intraoperative guide to hemodynamically significant lesions (Wright et al.), 888
Double-outlet right ventricle, postoperative false aneurysm of left ventricle and obstruction of left circumflex coronary artery complicating enlargement of restrictive ventricular septal defect in (Edwards et al.), 141
Ductus, patent, calcified, intra-aortic closure of: new operative method not requiring cardiopulmonary bypass (Wernly and Ameriso), 206
Dysfunction, cricopharyngeal, extended cervical esophagomyotomy for (Orringer), 669
renal, following total correction of tetralogy of Fallot in adult, predisposing factors of (Tanaka et al.), 135

E

Edema, pulmonary, noncardiogenic fulminating: newly recognized hazard during cardiac operations (Culliford et al.), 868
Editorial: Hierarchy of supraventricular pacemakers (Urthaler and James), 750
on papers by Naito, Wessel, and colleagues (Kirklin and Blackstone), 594
Electrode suitable for transvenous atrial and ventricular implantation, Helifix (Bergdahl), 794 (curr. tech.)
Embolism, air, massive, during cardiopulmonary bypass: causes, prevention, and management (Mills and Ochsner), 708
Embolization, air, during cannulation of ascending aorta, risk factors for (Beckman et al.), 302 (curr. tech.)
Embolus, bullet, to right ventricle, percutaneous transvenous removal of (Hartzler), 153
Employment status after coronary bypass operations and some cost considerations (Love), 68
Empyema thoracis, extrapleural, as direct extension of Ludwig's angina: case report (Young and Samson), 25
Endocardial pacing, unusual complications of (Lee and Chaux), 934
resection, directed, for treatment of recurrent sustained ventricular tachycardia, comparison of standard aneurysmectomy and aneurysmectomy with (Harken et al.), 527
Endocarditis, infective, and intracerebral mycotic aneurysm, operative experience with (Jara et al.), 28
Penicillium, successful management of (DelRossi et al.), 945
valve, prosthetic (Masur and Johnson), 31
Endomyocardial fibrosis from surgical standpoint (John et al.), 437
Energy replenishment, myocardial, and reversal of ischemic damage by substrate enhancement of secondary blood cardioplegia with amino acids during reperfusion (Lazar et al.), 350
Erratum, 313
Esophageal-aorta fistula induced by foreign body: first recorded survival (Ctercteko and Mok), 233
Esophagitis, Candida, following cardiac operation and short-term antibiotic prophylaxis (Gundry et al.), 661
postresection, intercostal pedicle method for control of: 13 year clinical study (Demos and Biele), 679
Esophagomyotomy, cervical, extended, for cricopharyngeal dysfunction (Orringer), 669
Excavatum, pectus: late results with and without operation (Humphreys and Jaretzki), 686
Exercise performance in tetralogy of Fallot after intracardiac repair (Wessel et al.), 582
Extrapleural empyema thoracis as direct extension of Ludwig's angina: case report (Young and Samson), 25

F

Failure, balloon (Heller), 232 (letter); Reply (Grötte), 232
right ventricular, acute, pulmonary artery balloon counterpulsation for (Miller et al.), 760
after repair of left ventricular aneurysm (Parr et al.), 79
Fallot, tetralogy of, with abnormal coronary artery: 1967 to 1977 (Hurwitz et al.), 129
in adult, predisposing factors of renal dysfunction following total correction of (Tanaka et al.), 135
criteria for reconstruction of right ventricular outflow tract in total correction of (Naito et al.), 574
early and late results of total correction of (Arciniegas et al.), 770
after intracardiac repair, exercise performance in (Wessel et al.), 582
surgical correction of recurrent sustained ventricular tachycardia following complete repair of (Harken et al.), 779
Famous men, let us now praise (Sloan), 159 (Presidential Address)
Fibrosing mediastinitis, idiopathic, unusual presenting complication of: tracheal stenosis (James et al.), 410

Fibrosis, endomyocardial, from surgical standpoint (John et al.), 437
Fistula, aorta-esophageal, induced by foreign body: first recorded survival (Ctercteko and Mok), 233
bronchopleural, following pneumonectomy for carcinoma of bronchus: mechanical stapling versus hand suturing (Forrester-Wood), 406
right coronary artery–to–right pulmonary artery: surgical correction (DeBakey and Lawrie), 225
subarachnoid-pleural (Beutel et al.), 21
Flaplike tissue, accessory, causing ventricular outflow obstruction (Gomes et al.), 211
Flotation catheters, balloon, pulmonary hemorrhage associated with: report of case and review of literature (Paulson et al.), 453
Flow, blood, intramyocardial, with xenon 127, determination of: new radionuclide with potential intraoperative application (Khuri et al.), 262
responses, isoproterenol-induced, in mammary and vein bypass grafts (Schmidt et al.), 319
Fontan's operation: expanded horizon (Marcelletti et al.), 764
Foreign body, aorta-esophageal fistula induced by: first recorded survival (Ctercteko and Mok), 233
Fragmentation of Celestin tube: cause of fatal intestinal perforation (Laughlin and Walker), 17
Fulminating noncardiogenic pulmonary edema: newly recognized hazard during cardiac operations (Culliford et al.), 868
Function, ventricular, global, in patients during cardiac operations using sonomicrometry, measurement of (Chitwood et al.), 724
postoperative, 10 years' experience including studies of: total anomalous pulmonary venous connection in infancy (Hammon et al.), 544

G

Ganglioneuroblastoma, intrathoracic (Zajtchuk et al.), 605
Gases, anesthetic, heated and humidified, reduction of operative heat loss and pulmonary secretions in neonates by use of (Fonkalsrud et al.), 718
Global ventricular function in patients during cardiac operations using sonomicrometry, measurement of (Chitwood et al.), 724
Glucose-containing solutions, effects of: cardioplegic arrest in pigs (Salerno and Chiong), 929
Glutaraldehyde-treated porcine bioprosthesis in aortic position, calcific stenosis of (Gordon et al.), 788
Gore-Tex (polytetrafluoroethylene) in canine coronary artery bypass (Hancock et al.), 94
Graft(s), bypass, to left anterior descending coronary artery: saphenous vein versus internal mammary artery (Tyras et al.), 327
mammary and vein, isoproterenol-induced flow responses in (Schmidt et al.), 319
coronary, clinical comparison between patients with saphenous vein and internal mammary artery as (Jones et al.), 334
replacement, composite, for aortic root aneurysms, results of (Helseth et al.), 754
totally occluded, successful transluminal angioplasty of (Ford), 463 (letter)
Grafting, patch, long-term results after repair of coarctation of aorta by (Bergdahl and Ljungqvist), 177
Granular cell myoblastomas, tracheobronchial, transbronchoscopic versus surgical resection of: suggested approach based on follow-up of all treated cases (Daniel et al.), 898
Guest Reviewers for The Journal of Thoracic and Cardiovascular Surgery, 807

H

Hamartoma, chondromatous, increased risk of lung cancer in patients with (Karasik et al.), 217
Hancock bioprosthesis, pathological substrates of thrombus formation after heart valve replacement with (Thiene et al.), 414
modified orifice and standard orifice bioprostheses in aortic position, hemodynamic and clinical comparison of (Rossiter et al.), 54
porcine bioprosthetic valve, clinical durability of (Oyer et al.), 824
Heart disease, congenital, progress in (Laura), 312 (letter); Reply (McGoon), 313
and kidney transplantation using total lymphoid irradiation and donor bone marrow in mongrel dogs (Kahn et al.), 125
and lung transplantation: autotransplantation and allotransplantation in primates with extended survival (Reitz et al.), 360
syndrome, left, hypoplastic: successful palliation with new operation (Doty et al.), 148
valve replacement with Hancock bioprosthesis, pathological substrates of thrombus formation after (Thiene et al.), 414
Heat loss, operative, and pulmonary secretions in neonates by use of heated and humidified anesthetic gases, reduction of (Fonkalsrud et al.), 718
Helifix, electrode suitable for transvenous atrial and ventricular implantation (Bergdahl), 794 (curr. tech.)
Hemoconcentration induced by surface hypothermia in infants (Chen et al.), 236
Hemodynamic and adrenergic responses to anesthesia and operation for myocardial revascularization (Hoar et al.), 242
and clinical comparison of Hancock modified orifice and standard orifice bioprostheses in aortic position (Rossiter et al.), 54
performance of Ionescu-Shiley prosthesis (Becker et al.), 613
Hemorrhage, pulmonary, associated with balloon flotation catheters: report of case and review of literature (Paulson et al.), 453
High-energy compounds, myocardial, and tissue blood flow consequences of adenosine catabolism on: adenosine metabolism and myocardial preservation (Foker et al.), 506
Homografts, aortic, used for reconstruction of right ventricular outflow tract, calcification of (Saravalli et al.), 909
Honored Speaker's Address: metamorphosis of cardiac surgery in Australia (Sutherland), 808
Hydralazine following valve replacement, afterload reduction with (Marco et al.), 50
Hyperemia, reactive, coronary, with Doppler probe, measurements of: intraoperative guide to hemodynamically significant lesions (Wright et al.), 888
Hypertensive mechanisms in coarctation of aorta: further studies of renin-angiotensin system (Parker et al.), 568
Hypoplasia, severe, of pulmonary artery, orthoterminally corrective operation in presence of (Sade et al.), 424
Hypoplastic left heart syndrome: successful palliation with new operation (Doty et al.), 148

Hypoplastic—Cont'd
pulmonary arteries and ventricular septal defect by right ventricular outflow construction, management of pulmonary atresia with (Piehler et al.), 552
Hypotension, distal, during repair of coarctation of aorta, technical and pharmacologic management of (Moreno et al.), 182
Hypothermia, local, with and without cold cardioplegia, comparison of: myocardial preservation (Laughlin et al.), 289
surface, in infants, hemoconcentration induced by (Chen et al.), 236
Hypothermic, cardioplegic protection of global ischemic canine myocardium, assessment of (Hess et al.), 293

I

Idiopathic fibrosing mediastinitis, unusual presenting complication of: tracheal stenosis (James et al.), 410
Impaction of intra-aortic balloon due to dislocation of central stylet (Grötte and Butchart), 228
Implantation, atrial and ventricular, transvenous, electrode suitable for, Helifix (Bergdahl), 794 (curr. tech.)
Incision, submammarian (Brom), 464 (letter); Reply (Laks), 464
Brom, for median sternotomy (Amato), 463 (letter); Reply (Laks), 464
Infancy, left atrial–left ventricular conduit for relief of congenital mitral stenosis in (Laks et al.), 782
See Surgical closure of ventricular septal defect during first twelve months of life (Arciniegas et al.), 921
total anomalous pulmonary venous connection in: 10 year experience including studies of postoperative ventricular function (Hammon et al.), 544
trans–pulmonary arterial repair of supracristal ventricular septal defects in (Tharion et al.), 948
Infants and children before and after operation, noninvasive physiological assessment in: coarctation of aorta (Waldman et al.), 187
hemoconcentration induced by surface hypothermia in (Chen et al.), 236
Infarct size, myocardial, experimental, in swine, failure of intra-aortic balloon pumping to reduce (Laas et al.), 85
Infarction, myocardial, acute, ventricular septal defect after: early repair (Loisance et al.), 61
Infection, pacemaker, in neonate, treatment of: case report (Brunswick et al.), 123
Infective endocarditis and intracerebral mycotic aneurysm, operative experience with (Jara et al.), 28
Injury(ies), brachial plexus, following median sternotomy (Vander Salm et al.), 447
vascular, cervicothoracic, acute, management of (Mavroudis et al.), 342
Intercostal pedicle method for control of postresection esophagitis: 13 year clinical study (Demos and Biele), 679
Intestinal perforation, fatal, cause of: fragmentation of Celestin tube (Laughlin and Walker), 17
Intra-aortic balloon due to dislocation of central stylet, impaction of (Grötte and Butchart), 228
pump for relief of aortic regurgitation: experimental study (Moulopoulos et al.), 38
pumping to reduce experimental myocardial infarct size in swine, failure of (Laas et al.), 85
Intra-aortic—Cont'd
closure of calcified patent ductus: new operative method not requiring cardiopulmonary bypass (Wernly and Ameriso), 206
Intracardiac repair, exercise performance in tetralogy of Fallot after (Wessel et al.), 582
Intracerebral mycotic aneurysm and infective endocarditis, operative experience with (Jara et al.), 28
Intramyocardial blood flow with xenon 127, determination of: new radionuclide with potential intraoperative application (Khuri et al.), 262
Intrapleural cough pressure in patients after thoracotomy (Yamazaki et al.), 600
Intrathoracic ganglioneuroblastoma (Zajtchuk et al.), 605
Intubation, palliative, of trachea and main bronchi (Clarke), 736
Ion concentration, calcium, and beta adrenergic activity: studies in anesthetized, intact dog (Scheidegger and Drop), 441
Ionescu-Shiley prosthesis, hemodynamic performance of (Becker et al.), 613
Irradiation, lymphoid, total, and donor bone marrow in mongrel dogs, heart and kidney transplantation using (Kahn et al.), 125
Ischemia, myocardial, return of ventricular function, and ultrastructural preservation, effect of multiple-dose potassium cardioplegia on (Lucas et al.), 102
Ischemic canine myocardium, global, assessment of hypothermic, cardioplegic protection of (Hess et al.), 293
damage, reversal of, and myocardial energy replenishment by substrate enhancement of secondary blood cardioplegia with amino acids during reperfusion (Lazar et al.), 350
Isolation, left atrial: new technique for treatment of supraventricular arrhythmias (Williams et al.), 373
surgical, of atrial septum from atria: identification of atrial septal pacemaker (Sealy and Seaber), 742
Isoproterenol-induced flow responses in mammary and vein bypass grafts (Schmidt et al.), 319

K

K^+ ion in cardioplegic solution, relationship between atrioventricular arrhythmias and concentration of (Ellis et al.), 517
Kay-Shiley prosthesis, isolated mitral valve replacement with: long-term follow-up and recommendations (Bowen et al.), 45
Kidney and heart transplantation using total lymphoid irradiation and donor bone marrow in mongrel dogs (Kahn et al.), 125

L

Ludwig's angina, extrapleural empyema thoracis as direct extension of: case report (Young and Samson), 25
Lung, bleb carcinoma of (Scannell), 904
cancer in patients with chondromatous hamartoma, increased risk of (Karasik et al.), 217
carcinoma(s), 445, with mediastinal lymph node metastases, prospective study of (Martini et al.), 390
by preoperative assay of lung tumor antigen–sensitive T lymphocytes, diagnosis, stage, and prognosis of (Ramey et al.), 656
resected, pathological stage grouping of patients with (Shields et al.), 400
and heart transplantation: autotransplantation and allotransplantation in primates with extended survival (Reitz et al.), 360

Lung—Cont'd
pseudolymphoma of: rare cause of solitary nodule. Case report and review of literature (Fisher et al.), 11
scans, ventilation-perfusion, quantitative, in surgical management of bronchogenic carcinoma, clinical value of (Wernly et al.), 535
Lymph node metastases, mediastinal, prospective study of 445 lung carcinomas with (Martini et al.), 390
syndrome, mucocutaneous, severe mitral regurgitation due to coronary arteritis of: new surgical entity (Kitamura et al.), 629
Lymphocytes, T, lung-tumor antigen–sensitive, diagnosis, stage, and prognosis of lung carcinoma by preoperative assay of (Ramey et al.), 656
Lymphoid irradiation, total, and donor bone marrow in mongrel dogs, heart and kidney transplantation using (Kahn et al.), 125

M

Malignant disease, total sternectomy for (París et al.), 459 (curr. tech.)
Mammary artery, internal, versus saphenous vein: bypass grafts to left anterior descending coronary artery (Tyras et al.), 327
as coronary graft, clinical comparison between patients with (Jones et al.), 334
and vein bypass grafts, isoproterenol-induced flow responses in (Schmidt et al.), 319
Marrow, bone, donor, and total lymphoid irradiation in mongrel dogs, heart and kidney transplantation using (Kahn et al.), 125
Mechanical stapling versus hand suturing: bronchopleural fistula following pneumonectomy for carcinoma of bronchus (Forrester-Wood), 406
Median sternotomy, brachial plexus injury following (Vander Salm et al.), 447
Brom submammarian incision for (Amato), 463 (letter); Reply (Laks), 464
for synchronous bilateral pulmonary operations (Meng et al.), 1
Mediastinal lymph node metastases, prospective study of 445 lung carcinomas with (Martini et al.), 390
Mediastinitis, fibrosing, idiopathic, unusual presenting complication of: tracheal stenosis (James et al.), 410
Medical therapy versus valve replacement (Engelman), 312 (letter); Reply (Rahimtoola), 312
Membrane versus bubble oxygenator for cardiac operations: prospective randomized study (Hessel et al.), 111
Metabolism, adenosine, and myocardial preservation: consequences of adenosine catabolism on myocardial high-energy compounds and tissue blood flow (Foker et al.), 506
Metastases, lymph node, mediastinal, prospective study of 445 lung carcinomas with (Martini et al.), 390
Mitral commissurotomy, open: modern re-evaluation (Halseth et al.), 842
regurgitation, severe, due to coronary arteritis of mucocutaneous lymph node syndrome: new surgical entity (Kitamura et al.), 629
stenosis, congenital, in infancy, left atrial–left ventricular conduit for relief of (Laks et al.), 782
valve repair, simplified intraoperative technique to test (Halseth et al.), 792 (curr. tech.)
Mitral valve—Cont'd
replacement, isolated, with Kay-Shiley prosthesis: long-term follow-up and recommendations (Bowen et al.), 45
Mortality, operative, from Collaborative Study in Coronary Artery Surgery (CASS), multivariate discriminant analysis of clinical and angiographic predictors of (Kennedy et al.), 876
rate, hospital, after repair of ventricular septal defect, incremental risk factors in (Rizzoli et al.), 494
Mucocutaneous lymph node syndrome, severe mitral regurgitation due to coronary arteritis of: new surgical entity (Kitamura et al.), 629
Multivariate discriminant analysis of clinical and angiographic predictors of operative mortality from Collaborative Study in Coronary Artery Surgery (CASS) (Kennedy et al.), 876
Mustard operation in isolated transposition of great arteries, current results with (Trusler et al.), 381
Myasthenia gravis in young adult, thymectomy for: long-term results (Clark et al.), 696
Mycotic aneurysm, intracerebral, and infective endocarditis, operative experience with (Jara et al.), 28
Myoblastomas, granular cell, tracheobronchial, transbronchoscopic versus surgical resection of: suggested approach based on follow-up of all treated cases (Daniel et al.), 898
Myocardial contractility in man, comparison of effect of blood cardioplegia to crystalloid cardioplegia on (Shapira et al.), 647
energy replenishment and reversal of ischemic damage by substrate enhancement of secondary blood cardioplegia with amino acids during reperfusion (Lazar et al.), 350
infarct size, experimental, in swine, failure of intra-aortic balloon pumping to reduce (Laas et al.), 85
infarction, acute, ventricular septal defect after: early repair (Loisance et al.), 61
intra-, blood flow with xenon 127, determination of: new radionuclide with potential intraoperative application (Khuri et al.), 262
ischemia, return of ventricular function, and ultrastructural preservation, effect of multiple-dose potassium cardioplegia on (Lucas et al.), 102
preservation and adenosine metabolism: consequences of adenosine catabolism on myocardial high-energy compounds and tissue blood flow (Foker et al.), 506
comparison of local hypothermia with and without cold cardioplegia (Laughlin et al.), 289
revascularization, hemodynamic and adrenergic responses to anesthesia and operation for (Hoar et al.), 242
Myocardium, canine, ischemic, global, assessment of hypothermic, cardioplegic protection of (Hess et al.), 293

N

Neonate(s), treatment of pacemaker infection in: case report (Brunswick et al.), 123
by use of heated and humidified anesthetic gases, reduction of operative heat loss and pulmonary secretions in (Fonkalsrud et al.), 718
Nerve block analgesia, intercostal, continuous, following thoracotomy, technique for (Olivet et al.), 308 (curr. tech.)
Node metastases, lymph, mediastinal, prospective study of 445 lung carcinomas with (Martini et al.), 390

Nodule, solitary, rare cause of: pseudolymphoma of lung. Case report and review of literature (Fisher et al.), 11
Noncardiogenic pulmonary edema, fulminating: newly recognized hazard during cardiac operations (Culliford et al.), 868

O

Obstruction, outflow, ventricular, accessory flaplike tissue causing (Gomes et al.), 211
Open mitral commissurotomy: modern re-evaluation (Halseth et al.), 842
Operation(s), Fontan's: expanded horizon (Marcelletti et al.), 764
Mustard, in isolated transposition of great arteries, current results with (Trusler et al.), 381
pulmonary, bilateral, synchronous, median sternotomy for (Meng et al.), 1
Orthoterminally corrective operation in presence of severe hypoplasia of pulmonary artery (Sade et al.), 424
Ostial stenosis, coronary, following aortic valve replacement without continuous coronary perfusion (Force et al.), 637
Outflow construction, right ventricular, management of pulmonary atresia with ventricular septal defect and hypoplastic pulmonary arteries by (Piehler et al.), 552
obstruction, ventricular, accessory flaplike tissue causing (Gomes et al.), 211
tract, right ventricular, calcification of aortic homografts used for reconstruction of (Saravalli et al.), 909
in total correction of tetralogy of Fallot, criteria for reconstruction of (Naito et al.), 574
Oxygen consumption of left ventricle during transapical left ventricular bypass (Laas et al.), 280
Oxygenator, membrane versus bubble, for cardiac operations: prospective randomized study (Hessel et al.), 111

P

Pacemaker(s) infection in neonate, treatment of: case report (Brunswick et al.), 123
septal, atrial, identification of: surgical isolation of atrial septum from atria (Sealy and Seaber), 742
supraventricular, hierarchy of (Urthaler and James), 750 (edit.)
Pacing, endocardial, unusual complications of (Lee and Chaux), 934
Palliation, successful, with new operation: hypoplastic left heart syndrome (Doty et al.), 148
Palliative intubation of trachea and main bronchi (Clarke), 736
Patch grafting, long-term results after repair of coarctation of aorta by (Bergdahl and Ljungqvist), 177
Patent ductus, calcified, intra-aortic closure of: new operative method not requiring cardiopulmonary bypass (Wernly and Ameriso), 206
Pathological stage grouping of patients with resected carcinoma of lung (Shields et al.), 400
Pathway, conduction, accessory, in Wolff-Parkinson-White syndrome, localization and interruption of (Iwa et al.), 271
Pectus excavatum: late results with and without operation (Humphreys and Jaretzki), 686
Pedicle method, intercostal, for control of postresection esophagitis: 13 year clinical study (Demos and Biele), 679
Penicillium endocarditis, successful management of (DelRossi et al.), 945
Perforation, intestinal, fatal, cause of: fragmentation of Celestin tube (Laughlin and Walker), 17
Perfusion, coronary, continuous, coronary ostial stenosis following aortic valve replacement without (Force et al.), 637
Phase I study of CPB systems (Mortensen), 642 (letter)
Pleural, subarachnoid-, fistula (Beutel et al.), 21
Plexus injury, brachial, following median sternotomy (Vander Salm et al.), 447
Pneumonectomy for carcinoma of bronchus, bronchopleural fistula following: mechanical stapling versus hand suturing (Forrester-Wood), 406
Polytetrafluoroethylene (Gore-Tex) in canine coronary artery bypass (Hancock et al.), 94
Population, defined, 5 year study of: trends in cardiac surgery (Kennedy et al.), 702
Porcine bioprosthetic valve, Hancock, clinical durability of (Oyer et al.), 824
Postresection esophagitis, intercostal pedicle method for control of: 13 year clinical study (Demos and Biele), 679
Potassium cardioplegia, multiple-dose, on myocardial ischemia, return of ventricular function, and ultrastructural preservation, effect of (Lucas et al.), 102
Preservation, myocardial, and adenosine metabolism: consequences of adenosine catabolism on myocardial high-energy compounds and tissue blood flow (Foker et al.), 506
comparison of local hypothermia with and without cold cardioplegia (Laughlin et al.), 289
ultrastructural, myocardial ischemia, and return of ventricular function, effect of multiple-dose potassium cardioplegia on (Lucas et al.), 102
Presidential Address: Let us now praise famous men (Sloan), 159
Pressure, cough, intrapleural, in patients after thoracotomy (Yamazaki et al.), 600
Primates with extended survival, autotransplantation and allotransplantation in: heart and lung transplantation (Reitz et al.), 360
Prosthesis, Ionescu-Shiley, hemodynamic performance of (Becker et al.), 613
Kay-Shiley, isolated mitral valve replacement with: long-term follow-up and recommendations (Bowen et al.), 45
St. Jude Medical (Chaux and Gray), 800 (letter); Reply (Hehrlein), 800
Prosthetic valve endocarditis (Masur and Johnson), 31
Protection, cardioplegic, hypothermic, of global ischemic canine myocardium, assessment of (Hess et al.), 293
Pseudolymphoma of lung: rare cause of solitary nodule. Case report and review of literature (Fisher et al.), 11
Pulmonary artery(ies) balloon counterpulsation for acute right ventricular failure (Miller et al.), 769
banded, tricuspid atresia, and transposition of great arteries: repair by arterial switch, coronary artery reimplantation, and right atrioventricular valved conduit (Freedom et al.), 621
banding: analysis of current risks, results, and indications (Stewart et al.), 431
fistula, right coronary artery–to–right: surgical correction (DeBakey and Lawrie), 225
hypoplastic, and ventricular septal defect by right ventricular outflow construction, management of pulmonary atresia with (Piehler et al.), 552
orthoterminally corrective operation in presence of severe hypoplasia of (Sade et al.), 424
trans–, arterial repair of supracristal ventricular septal defects in infancy (Tharion et al.), 948 (curr. tech.)

Pulmonary—Cont'd
atresia with ventricular septal defect and hypoplastic pulmonary arteries by right ventricular outflow construction, management of (Piehler et al.), 552
edema, noncardiogenic, fulminating: newly recognized hazard during cardiac operations (Culliford et al.), 868
hemorrhage associated with balloon flotation catheters: report of case and review of literature (Paulson et al.), 453
operations, bilateral, synchronous, median sternotomy for (Meng et al.), 1
secretions and operative heat loss in neonates by use of heated and humidified anesthetic gases, reduction of (Fonkalsrud et al.), 718
sequestrations, bilateral (Roe et al.), 8
tuberculosis in children (Lowe et al.), 221
venous connection, anomalous, total, in infancy: 10 years' experience including studies of postoperative ventricular function (Hammon et al.), 544
Pump, balloon, intra-aortic, for relief of aortic regurgitation: experimental study (Moulopoulos et al.), 38
Pumping, balloon, intra-aortic, to reduce experimental myocardial infarct size in swine, failure of (Laas et al.), 85

R

Radionuclide, new, with potential intraoperative application: determination of intramyocardial blood flow with xenon 127 (Khuri et al.), 262
Reactive hyperemia, coronary, with Doppler probe, measurements of: intraoperative guide to hemodynamically significant lesions (Wright et al.), 888
Reconstruction of right ventricular outflow tract, calcification of aortic homografts used for (Saravalli et al.), 909
in total correction of tetralogy of Fallot, criteria for (Naito et al.), 574
Regurgitation, aortic, intra-aortic balloon pump for relief of: experimental study (Moulopoulos et al.), 38
mitral, severe, due to coronary arteritis of mucocutaneous lymph node syndrome: new surgical entity (Kitamura et al.), 629
Reimplantation, coronary artery, arterial switch, and right atrioventricular valved conduit, repair by: triscuspid atresia, transposition of great arteries, and banded pulmonary artery (Freedom et al.), 621
Removal, transvenous, percutaneous, of bullet embolus to right ventricle (Harizler), 153
Renal dysfunction following total correction of tetralogy of Fallot in adult, predisposing factors of (Tanaka et al.), 135
Renin-angiotensin system, further studies of: hypertensive mechanisms in coarctation of aorta (Parker et al.), 568
Repair of coarctation of aorta by patch grafting, long-term results after (Bergdahl and Ljungqvist), 177
technical and pharmacologic management of distal hypotension during (Moreno et al.), 182
complete, of tetralogy of Fallot, surgical correction of recurrent sustained ventricular tachycardia following (Harken et al.), 779
intracardiac, exercise performance in tetralogy of Fallot after (Wessel et al.), 582
of left ventricular aneurysm, right ventricular failure after (Parr et al.), 79
mitral valve, simplified intraoperative technique to test (Halseth et al.), 792 (curr. tech.)
Repair—Cont'd
trans-pulmonary arterial, of supracristal ventricular septal defects in infancy (Tharion et al.), 948 (curr. tech.)
tricupid valve, is it necessary? (Duran et al.), 849
of ventricular septal defect, incremental risk factors in hospital mortality rate after (Rizzoli et al.), 494
Reperfusion, myocardial energy replenishment and reversal of ischemic damage by substrate enhancement of secondary blood cardioplegia with amino acids during (Lazar et al.), 350
Replacement, composite graft, for aortic root aneurysms, results of (Helseth et al.), 754
Replacement, valve. *See* Valve.
Resected carcinoma of lung, pathological stage grouping of patients with (Shields et al.), 400
Resection, coarctation, in children with Turner's syndrome: note of caution (Ravelo et al.), 427
endocardial, directed, for treatment of recurrent sustained ventricular tachycardia, comparison of standard aneurysmectomy and aneurysmectomy with (Harken et al.), 527
transbronchoscopic versus surgical, of tracheobronchial granular cell myoblastomas: suggested approach based on follow-up of all treated cases (Daniel et al.), 898
Revascularization, myocardial, hemodynamic and adrenergic responses to anesthesia and operation for (Hoar et al.), 242
Risk factor(s), incremental, in hospital mortality rate after repair of ventricular septal defect (Rizzoli et al.), 494
in late results of valve replacement, year of operation as (Macmanus et al.), 834
Root aneurysms, aortic, results of composite graft replacement for (Helseth et al.), 754

S

St. Jude Medical prosthesis (Chaux and Gray), 800 (letter); Reply (Hehrlein), 800
Samson Thoracic Surgical Society: announcement of 1981 annual meeting, 645, 805, 953
Saphenous vein versus internal mammary artery: bypass grafts to left anterior descending coronary artery (Tyras et al.), 327
as coronary graft, clinical comparison between patients with (Jones et al.), 334
Scans, lung, ventilation-perfusion, quantitative, in surgical management of bronchogenic carcinoma, clinical value of (Wernly et al.), 535
Secretions, pulmonary, and operative heat loss in neonates by use of heated and humidified anesthetic gases, reduction of (Fonkalsrud et al.), 718
Septum, atrial, from atria, surgical isolation of: identification of atrial septal pacemaker (Sealy and Seaber), 742
Sequestrations, pulmonary, bilateral (Roe et al.), 8
Sinus of Valsalva, right, anomalous left main coronary artery originating from: pathophysiology, angiographic definition, and surgical approaches (Moodie et al.), 198
Solution(s), cardioplegic, relationship between atrioventricular arrhythmias and concentration of K^+ ion in (Ellis et al.), 517
glucose-containing, effects of: cardioplegic arrest in pigs (Salerno and Chiong), 929
Sonomicrometry, measurement of global ventricular function in patients during cardiac operations using (Chitwood et al.), 724

Spasm, coronary artery, and perioperative cardiac arrest (Pichard et al.), 249
Stapling, mechanical, versus hand suturing: bronchopleural fistula following pneumonectomy for carcinoma of bronchus (Forrester-Wood), 406
Stenosis, aortic, valvular, congenital, in children, long-term follow-up of patients after valvotomy for: clinical and actuarial follow-up (Sandor et al.), 171
calcific, of glutaraldehyde-treated porcine bioprosthesis in aortic position (Gordon et al.), 788
mitral, congenital, in infancy, left atrial–left ventricular conduit for relief of (Laks et al.), 782
ostial, coronary, following aortic valve replacement without continuous coronary perfusion (Force et al.), 637
tracheal: unusual presenting complication of idiopathic fibrosing mediastinitis (James et al.), 410
Sternal wound complications: management and results (Serry et al.), 861
Sternectomy, total, for malignant disease (París et al.), 459 (curr. tech.)
Sternotomy, median, brachial plexus injury following (Vander Salm et al.), 447
Brom submammarian incision for (Amato), 463 (letter); Reply (Laks), 464
for synchronous bilateral pulmonary operations (Meng et al.), 1
Stylet, central, impaction of intra-aortic balloon due to impaction of (Grötte and Butchart), 228
Subarachnoid-pleural fistula (Beutel et al.), 21
Submammarian incision (Brom), 464 (letter); Reply (Laks), 464
Brom, for median sternotomy, (Amato), 463 (letter); Reply (Laks), 464
Supracristal ventricular septal defects in infancy, trans–pulmonary arterial repair of (Tharion et al.), 948 (curr. tech.)
Supraventricular arrhythmias, new technique for treatment of: left atrial isolation (Williams et al.), 373
pacemakers, hierarchy of (Urthaler and James), 750 (edit.)
Surface hypothermia in infants, hemoconcentration induced by (Chen et al.), 236
Surgery, cardiac, in Australia, metamorphosis of (Sutherland), 808 (Honored Speaker's Address)
trends in: 5 year study of defined population (Kennedy et al.), 702
Surgical management of multiple ventricular septal defects (Kirklin et al.), 485
Survival, extended, autotransplantation and allotransplantation in primates with: heart and lung transplantation (Reitz et al.), 360
Suturing, hand, versus mechanical stapling: bronchopleural fistula following pneumonectomy for carcinoma of bronchus (Forrester-Wood), 406
Switch, arterial, coronary artery reimplantation, and right atrioventricular valved conduit, repair by: tricuspid atresia, transposition of great arteries, and banded pulmonary artery (Freedom et al.), 621
Syndrome, left heart, hypoplastic: successful palliation with new operation (Doty et al.), 148
lymph node, mucocutaneous, severe mitral regurgitation due to coronary arteritis of: new surgical entity (Kitamura et al.), 629
Turner's, coarctation resection in children with: note of caution (Ravelo et al.), 427
Syndrome—Cont'd
Wolff-Parkinson-White, localization and interruption of accessory conduction pathway in (Iwa et al.), 271

T

T lymphocytes, lung tumor antigen–sensitive, diagnosis, stage, and prognosis of lung carcinoma by preoperative assay of (Ramey et al.), 656
Tachycardia, ventricular, sustained, recurrent, comparison of standard aneurysmectomy and aneurysmectomy with directed endocardial resection for treatment of (Harken et al.), 527
following complete repair of tetralogy of Fallot, surgical correction of (Harken et al.), 779
Technique, intraoperative, simplified, to test mitral valve repair (Halseth et al.), 792 (curr. tech.)
Tetralogy of Fallot with abnormal coronary artery: 1967 to 1977 (Hurwitz et al.), 129
in adult, predisposing factors of renal dysfunction following total correction of (Tanaka et al.), 135
criteria for reconstruction of right ventricular outflow tract in total correction of (Naito et al.), 574
early and late results of total correction of (Arciniegas et al.), 770
after intracardiac repair, exercise performance in (Wessel et al.), 582
surgical correction of recurrent sustained ventricular tachycardia following complete repair of (Harken et al.), 779
Thoracic, intra-, ganglioneuroblastoma (Zajtchuk et al.), 605
Thoracotomy, intrapleural cough pressure in patients after (Yamazaki et al.), 600
technique for continuous intercostal nerve block analgesia following (Olivet et al.), 308 (curr. tech.)
Thrombus formation after heart valve replacement with Hancock bioprosthesis, pathological substrates of (Thiene et al.), 414
Thymectomy for myasthenia gravis in young adult: long-term results (Clark et al.), 696
Tissue, flaplike, accessory, causing ventricular outflow obstruction (Gomes et al.), 211
Total anomalous pulmonary venous connection in infancy: 10 years' experience including studies of postoperative ventricular function (Hammon et al.), 544
Trachea and main bronchi, palliative intubation of (Clarke), 736
Tracheal stenosis: unusual presenting complication of idiopathic fibrosing mediastinitis (James et al.), 410
Tracheobronchial granular cell myoblastomas, transbronchoscopic versus surgical resection of: suggested approach based on follow-up of all treated cases (Daniel et al.), 898
Tract, outflow, right ventricular, calcification of aortic homografts used for reconstruction of (Saravalli et al.), 909
Transbronchoscopic versus surgical resection of tracheobronchial granular cell myoblastomas: suggested approach based on follow-up of all treated cases (Daniel et al.), 898
Transluminal angioplasty, successful, of totally occluded grafts (Ford), 463 (letter)
Transplantation, heart and kidney, using total lymphoid irradiation and donor bone marrow in mongrel dogs (Kahn et al.), 125
and lung: autotransplantation and allotransplantation in primates with extended survival (Reitz et al.), 360

Transposition of great arteries, isolated, current results with Mustard operation in (Trusler et al.), 381
tricuspid atresia, and banded pulmonary artery: repair by arterial switch, coronary artery reimplantation, and right atrioventricular valved conduit (Freedom et al.), 621
Trans–pulmonary arterial repair of supracristal ventricular septal defects in infancy (Tharion et al.), 948 (curr. tech.)
Transvenous atrial and ventricular implantation, electrode suitable for, Helifix (Bergdahl), 794 (curr. tech.)
removal, percutaneous, of bullet embolus to right ventricle (Hartzler), 153
Tricuspid atresia, transposition of great arteries, and banded pulmonary artery: repair by arterial switch, coronary artery reimplantation, and right atrioventricular valved conduit (Freedom et al.), 621
valve repair, is it necessary? (Duran et al.), 849
Tube, Celestin, fragmentation of: cause of fatal intestinal perforation (Laughlin and Walker), 17
Tuberculosis, pulmonary, in children (Lowe et al.), 221
Turner's syndrome, coarctation resection in children with: note of caution (Ravelo et al.), 427

V

Valsalva, sinus of, right, anomalous left main coronary artery originating from: pathophysiology, angiographic definition, and surgical approaches (Moodie et al.), 198
Valve, bioprosthetic, porcine, Hancock, clinical durability of (Oyer et al.), 824
endocarditis, prosthetic (Masur and Johnson), 31
repair, mitral, simplified intraoperative technique to test (Halseth et al.), 792 (curr. tech.)
tricuspid, is it necessary? (Duran et al.), 849
replacement, afterload reduction with hydralazine following (Marco et al.), 50
aortic, without continuous coronary perfusion, coronary ostial stenosis following (Force et al.), 637
heart, with Hancock bioprosthesis, pathological substrates of thrombus formation after (Thiene et al.), 414
versus medical therapy (Engelman), 312 (letter); Reply (Rahimtoola), 312
mitral, isolated, with Kay-Shiley prosthesis: long-term follow-up and recommendations (Bowen et al.), 45
universal (Spodick), 312 (letter); Reply (Rahimtoola), 312
year of operation as risk factor in late results of (Macmanus et al.), 834
Valved conduit, atrioventricular, right, arterial switch, and coronary artery reimplantation, repair by: tricuspid atresia, transposition of great arteries, and banded pulmonary artery (Freedom et al.), 621
Valvotomy for congenital valvular aortic stenosis in children, long-term follow-up of patients after: clinical and actuarial follow-up (Sandor et al.), 171
Valvular aortic stenosis, congenital, in children, long-term follow-up of patients after valvotomy for: clinical and actuarial follow-up (Sandor et al.), 171
Vascular injuries, cervicothoracic, acute, management of (Mavroudis et al.), 342
Vein and mammary bypass grafts, isoproterenol-induced flow responses in (Schmidt et al.), 319
saphenous, versus internal mammary artery: bypass grafts to left anterior descending coronary artery (Tyras et al.), 327
Vein, saphenous, and internal mammary artery—Cont'd
as coronary graft, clinical comparison between patients with (Jones et al.), 334
Venous connection, pulmonary, anomalous, total, in infancy: 10 years' experience including studies of postoperative ventricular function (Hammon et al.), 544
Ventilation-perfusion lung scans, quantitative, in surgical management of bronchogenic carcinoma, clinical value of (Wernly et al.), 535
Ventricle, left, postoperative false aneurysm of, and obstruction of left circumflex coronary artery complicating enlargement of restrictive ventricular septal defect in double-outlet right ventricle (Edwards et al.), 141
during transapical left ventricular bypass, oxygen consumption of (Laas et al.), 280
right, double-outlet, postoperative false aneurysm of left ventricle and obstruction of left circumflex coronary artery complicating enlargement of restrictive ventricular septal defect in (Edwards et al.), 141
percutaneous transvenous removal of bullet embolus to (Hartzler), 153
Ventricular and atrial implantation, transvenous, electrode suitable for, Helifix (Bergdahl), 794 (curr. tech.)
conduit, left atrial–left, for relief of congenital mitral stenosis in infancy (Laks et al.), 782
failure, right, acute, pulmonary artery balloon counterpulsation for (Miller et al.), 760
after repair of left ventricular aneurysm (Parr et al.), 79
function, global, in patients during cardiac operations using sonomicrometry, measurement of (Chitwood et al.), 724
postoperative, 10 years' experience including studies of: total anomalous pulmonary venous connection in infancy (Hammon et al.), 544
return of, myocardial ischemia, and ultrastructural preservation, effect of multiple-dose potassium cardioplegia on (Lucas et al.), 102
outflow construction, right, management of pulmonary atresia with ventricular septal defect and hypoplastic pulmonary arteries by (Piehler et al.), 552
obstruction, accessory flaplike tissue causing (Gomes et al.), 211
tract, right, calcification of aortic homografts used for reconstruction of (Saravalli et al.), 909
in total correction of tetralogy of Fallot, criteria for reconstruction of (Naito et al.), 574
septal defect(s) after acute myocardial infarction: early repair (Loisance et al.), 61
during first twelve months of life, surgical closure of (Arciniegas et al.), 921
and hypoplastic pulmonary arteries by right ventricular outflow construction, management of pulmonary atresia with (Piehler et al.), 552
incremental risk factors in hospital mortality rate after repair of (Rizzoli et al.), 494
multiple, surgical management of (Kirklin et al.), 485
restrictive, in double-outlet right ventricle, postoperative false aneurysm of left ventricle and obstruction of left circumflex coronary artery complicating enlargement of (Edwards et al.), 141
supracristal, in infancy, trans–pulmonary arterial repair of (Tharion et al.), 948 (curr. tech.)

Ventricular—Cont'd
tachycardia, sustained, recurrent, comparison of standard aneurysmectomy and aneurysmectomy with directed endocardial resection for treatment of (Harken et al.), 527
following complete repair of tetralogy of Fallot, surgical correction of (Harken et al.), 779

W

Wolff-Parkinson-White syndrome, localization and interruption of accessory conduction pathway in (Iwa et al.), 271
Wound complications, sternal: management and results (Serry et al.), 861

X

Xenon 127, determination of intramyocardial blood flow with: new radionuclide with potential intraoperative application (Khuri et al.), 262

Y

Young adult, thymectomy for myasthenia gravis in: long-term results (Clark et al.), 696